

SECRET IN THE DIRT



**MIKE MAVES
WITH STEVE ELKINGTON**

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INTRODUCTION

Introduction

I grew up playing a fun and fairly proficient, but “loosey goosey” style of golf. I learned the game basically on my own in late childhood and carried on with it into my late teens. I have had three lessons in my life. The first was a group lesson on holding and swinging the club, along with the basic rules of golf and etiquette from Bill Kozak when I was 12 years of age. The second was a 15 minute full swing lesson from John White, who helped me with my grip when I was 20. The third was a short game lesson in 1994 from Curtis LaBelle, who was also responsible for introducing me to Moe Norman. The rest I learned on my own, essentially by way of trial and error, watching other golfers and sifting through many, many golf books, the most valuable of which was and continues to be Ben Hogan’s Five Lessons.

As a young adult, I managed to obtain a History degree from Queen’s University in Kingston, Ontario, Canada. Upon graduation I decided to get a little more serious about learning the game of golf. I did this from both a playing and historical perspective. In history we learn that to interpret any text you must take into account the context of its writing. This means that, at the time something is written, the immediately preceding and concurrent prevailing thought/knowledge must be considered and afforded great weight when analyzing the worth of the work. We can then shift that document forward to assess its current relevance and value as well. This is the approach that I took in my study of Mr. Hogan and his swing.

It has bothered me immensely to hear instructors say things about Five Lessons like “Well, that was all fine for Ben Hogan because he was so strong.... or supple... or flexible... or whatever, or that he practiced more than you ever could, so you can certainly listen to what he had to say but then you should probably basically do what I say.” Sometimes instructors will say “Well yes that is what Hogan said, but this is what I think he really meant.” I don’t know why we should accept information about Mr. Hogan’s swing from people who cannot make the swing, or at the very least a reasonable facsimile of his swing. That to me is just “baloney” as I say occasionally. I use another word when among friends. Why would you not listen to what the greatest ball striker in the history of the game had to say about the swing and follow it precisely?

I believe that Ben Hogan carefully considered and fully meant every word he ever uttered or committed to print, and he meant it exactly the way he said it. In 1985, Nick Seitz asked him if he would change anything in Five Lessons. Mr. Hogan said “I would write it the same way I wrote it in 1957.” So it is with respect to this statement that I put forward my attempt to clarify certain critical elements of the Five Lessons text in



the hope that it will make *The Modern Fundamentals of Golf* more accessible to all and turn more people onto reading and learning the golf swing from what I believe is golf's most remarkable instruction book.

As I said, at the time I left school I decided to reapply myself to learning the game of golf and so I began to read a great many famous texts from the likes of Bobby Jones, Ernest Jones, Henry Cotton, Tommy Armour and George Knudson, as well as many others. In fact, it was Mr. Knudson's book *The Natural Golf Swing* that led me to seriously study Ben Hogan. Prior to that, I had known he was a great and gutsy player and a remarkable ball striker, but in my mind he was just the old guy in those great advertisements about feeling a shot that went straight into your heart. So, it is by way of George Knudson and his ideas that I first came to read Ben Hogan's famous text. And it is with both a playing and historical perspective that I have assessed all other documents that I have come into contact with pertaining to the life and swing technique of Ben Hogan.

Like all who study Mr. Hogan, I became mesmerized by his legacy of incredible golf and undeniable courage. Through studying Hogan and his method, I eventually learned to make a golf swing that many say is quite reminiscent of his action. This came to the public's attention on the Internet by way of some videos showing my attempts at providing instruction and basic information to a novice golfer. This in turn resulted in an enormous forum thread at [Golfwrx.com](#), which contains information, commentary and testimonials from not only me, but also from a number of similarly knowledgeable and interested forum participants. I recommend that anyone interested in bettering their golf swing take the time to read through this engaging Internet forum thread.



[Here's a link: GolfWRX Thread](#)

This book contains a number of anecdotes, which I hope you will find somewhat entertaining. But what they are really there to do is illustrate how certain things came together to develop my understanding of the golf swing and how certain information came to me through a combination of good fortune, logical inquiry and pure happenstance. As with the prevailing feel of my little YouTube video bits, I believe and it has been my experience that instruction often works best when disguised as entertainment. As Henny

Bogan would say "The Secret is In the Dirt!", so let's start digging.



Preface

Most of what I know about hitting a golf ball I learned from playing lots of golf a long time ago, practicing a ton back then, and applying the good old method of trial and error. As a low handicap amateur, I got to play in some great amateur tournaments in Canada and I also was able to play against and speak with Canadian pros like Moe Norman, Jerry Anderson and others. In the early nineties I got turned on to digging into films and articles about Ben Hogan and Mr. Hogan's two books Power Golf and Ben Hogan's Five Lessons - The Modern Fundamentals of Golf, which I believe, as do countless authorities on golf, is the finest book ever written on the mechanics of the golf swing. If you do not own it, you should. In fact, if you are at all serious about golf you should have more than one copy. One pristine copy which should be kept safely on a shelf in your golf book collection (for posterity or perhaps to someday pass on to one of your kids) and another which you should freely highlight and annotate to make note of the portions of special relevance to your own swing as you are learning. If you don't own Five Lessons, buy it NOW! That is how strongly I feel about the book.

Now, although there are a multitude of proponents of the book, it has also attracted its share of detractors. Some claim that the book was overblown, too detailed and technical. Others accused the book of creating a "nation of hip spinners" because of what has been a chronic misinterpretation of a critical portion of the text. What I am setting out to do is to try to explain as best as I can, the critical elements of the golf swing and in so doing put Mr. Hogan's book into its most appropriate context by clearing up some of what I feel are the prevailing misinterpretations of the text. In the process, I hope to also show you the lost fundamental that I believe is truly The Secret in the Dirt.



[Click Here To Buy A Copy Of Ben Hogan's "Five Lessons"](#)





Sam Snead

*7 Time Major
Championship Winner,
82 PGA Tour Wins and
Member of World Golf Hall
of Fame*

SETUP

A PRIMER FOR NEWBIES

GRIP, STANCE AND POSTURE

“The legs and lower body in general stabilize, support and motivate the bulk of the moves that the golfer makes.”

For those of you who don't own George Knudson's *The Natural Golf Swing* or Ben Hogan's *Five Lessons: The Modern Fundamentals of Golf*, or some other instructional text, here, in video and in words, is the quick and dirty on the setup.

Most books start with the grip, but I am going to start with the stance and posture because the movement of the body is the foundation of this book of instruction. The finest articulation of the grip, stance and posture I have seen related is contained in the books mentioned above, so if you have them and haven't opened them in a while you should do that. Otherwise, read on.

Whether you are Ben Hogan or George Knudson, Peter Thomson, or the great baseball player Ted Williams for that matter, the orientation of the feet is the same, for reasons that I will explain.

The legs and lower body in general stabilize, support and motivate the bulk of the moves that the golfer makes. They have a role as both the motor and governor at the same time. The basic stance has the back foot square to the intended line towards the target and the front foot turned or “flared” outward towards the target. The reason for this is simple. The back leg requires resistance to limit the turn away from the target and thereby act as a governor on the backswing motion. The front leg, in contrast, has to catch you in a way that does not impede or stall the motion it is confronted with until the ball is gone. The front leg helps in a supportive fashion, but its primary job really is just to be in a position to get out of the way and keep the golfer out of his own way en route to the target. The back leg also must be in a position to push inward, towards the ball, and target ward on the downswing. In effect, the back leg is the stabilizer for the backswing and the front leg stabilizes and supports the finish. In other words, it is there to make sure you don't land on your ass. The amount of flare in the forward foot will depend on your own flexibility.



The width of the stance should be such that with a 5-iron, your hands would hang just over your kneecaps. You support the weight on the inside of the feet, running from the ball of the foot through the heel. If you are in balance, you should be able to lift your toes inside of your shoes.

The ball should sit for most shots under the left armpit and comfortably away from you so that the outstretched club head sits easily behind it without any extreme effort to reach for it.

You should have a slight bend in the knees, but basically be comfortably erect. Excessive bending is of little benefit.

Grip and Stance Primer



**WATCH
NOW**



In terms of the grip, I prefer the overlap, or Vardon-style grip. The hands should oppose one another as in prayer. For a right handed player, if you set the club down with the face square to your target, the left thumb should ride more or less on top or slightly to the right of center on the shaft. The side of the left thumb should feel as though it was married to the side of the hand connected up to the base knuckle of the left forefinger. That forefinger crooks under the shaft and pulls straight upward from below the shaft. The last three fingers of the left hand apply general pressure on the shaft, pressing it up against the heel of the palm. The grip lies across the palm, finishing supported by the crook of the forefinger. The right hand sits fairly much atop the left hand, with the middle and ring fingers of the right hand crooked under the shaft next to and in the same manner as the left forefinger.



The following are pictures of the correct golf grip:



For a right handed player.. the left thumb should ride more or less on top or slightly to the right of center on the shaft.

I'VE COMPLETED MY GRIP
Once I've taken care of the grip, I'm ready to play some golf.

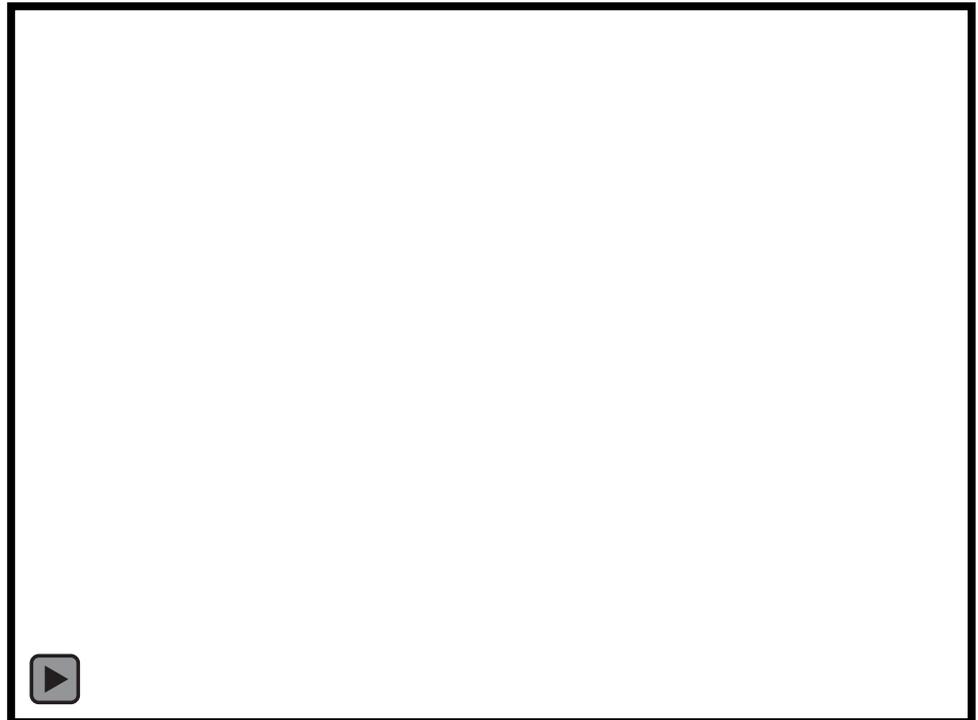


These two fingers pull up from the bottom. The cup formed in the right hand as it wraps around, sits neatly atop the left thumb. The baby finger of the right hand wraps around the knuckle of the left forefinger. I will show two orientations of the left hand grip. One with the thumb on top and one with it set to the right of center. Each orientation is fine, but will lead to slightly different releases.

Sevam 1 Grip



**WATCH
NOW**



Learning to Swing

I was asked recently about the process of learning the golf swing and I said that in learning the golf swing what you do is you add, you add, and you add little things here, little things there. Then, to get better, you basically just have to start to strip things away. When there is nothing left to take away you will probably be pretty close to your most efficient motion and the best that you are going to get as far as the swinging part goes.

You almost always start with a slice. Then you practice your butt off until you learn to get it to go straight. Once you've done that you will inevitably develop a hook. The hard part then is to get the damned thing to go straight again. This process generally takes a few years of hard work and diligent practice. But, once you get through it you've pretty much worked the whole thing all the way through. You are in pretty good shape to fix your own problems as they arise from there on out. If you don't teach yourself



and learn via trial and error, you might not develop this ability to the same extent as the self taught, but nonetheless, once you run the full gamut of predominant shots you're in pretty good shape. There's always something to work on, of course, but as far as swinging the club goes, in the final analysis, you will find that like many things the "less is more" approach will give you your best results. So it is the subtraction that truly is the final step in creating a great golf swing.

The earlier in life you can start playing golf the better. A child has a great advantage in learning because of something that actually begins as a significant obstacle for them. His or her equipment is generally far too heavy and much too long. Confronted with this unwieldy equipment and the task at hand, the child will find a way to get that club head moving. When shown the basics of a grip, with the hands generally together in some fashion, the child will learn to "swing" the club. The reason the child learns to swing is that they are not strong enough to move the club with any great effect in any other way. Adult beginner golfers, because they generally have the requisite minimum strength, especially with today's lighter than light equipment, are at a considerable disadvantage in this regard. Many will actually never learn what it feels like to truly "swing" a golf club. They will think they swing, but they do not. We will go into what constitutes "a swing" later.

I was fortunate that my father, who was not much more than a social golfer at the time did me the great service of encouraging and enabling me to play golf while I was still quite young. I was lucky enough also to learn golf while it was still in the era of forged blades and persimmon woods. I was a ten-year-old kid in sneakers, with a matching set of Spalding Starflite irons and woods in a plaid pencil bag, booking it around the Oak Hall par-three course in Niagara Falls, Ontario. I was a bit of a naïve kid who was actually thrilled that the Starflite balls in the cheap bin at the Oak Hall Pro shop actually matched my clubs. Who needs a Titleist when my ball matches my clubs? On the golf club front, I couldn't wait to graduate to a full set of Wilson Crests -- Very shiny.

Anyway, I bring this up not just because I like to talk about myself but because, more to the point of our little story, this is also the way that young Bennie Hogan started. The difference, of course, is where I was a somewhat privileged little twerp; Bennie was an undersized, dirt-poor 12-year-old caddie, taking odd cuts at a ball he would find with whatever golf clubs he could get his hands on. That was when he wasn't carrying, cleaning or fixing some club member's clubs. So I am certain that his learning began with attempts to swing clubs that were too big and too heavy for him just like most of the rest of us did. The thing of this though, and why I bring it up, is that a kid will find



a way to whip that club around and hit that ball. And, once he learns to hit it at all the next thing he'll want to do is blast that thing straight into next week. That's when you get into gripping it really strong and start learning to hit those running hooks. Young Bennie Hogan had, no doubt, mastered what is generally called "the Caddie Swing" and the art of the rope hook before he was 15. It is almost certain that these formative strokes colored his golf swing to one degree or another for the rest of his life.

In fact, it was "The Caddie Swing" motion with a modification (The Secret – a cupping of the left wrist as revealed in Life Magazine published August 8, 1955) that he turned to later in life when it was time to cure the hook that plagued his game as a professional. One thing is certain though, Hogan had learned to make a true swing at a reasonably young age. Today, I am not sure if many people really know what a true "swing" is. Hopefully by the end of this book you will.



TAKING THE CLUB BACK

OR WHAT THE HELL IS THE DEAL WITH PRONATION, SUPINATION, & PLANE?

“There are a number of points where our understanding of these terms can send us into the ditch.”

I did a video on pronation, supination and plane that a lot of people found helpful. It is below for you to check out.

There is a great deal of confusion about these terms because they accompany a number of other common actions. For instance, the bowing of the wrist in the golf swing happens while it is rotating. It is the act of rotating the hand that is called supination, rather than the bowing action that usually accompanies it, so people have commonly confused these two separate but related actions. In a nutshell, if you turn the left hand to face palm down you have pronated the left arm at some point. The rotation that caused the hand to turn palm down could have resulted from a rotation at the shoulder or the turning of the forearm bones over top of one another. In either case, this turning is called pronation. When the left hand rotates in the opposite direction it is called supination. In the left arm, pronation moves the arms clockwise from your perspective. And in the right arm, pronation moves the arms counterclockwise from your perspective. There are a number of points where our understanding of these terms can send us into the ditch.

Now, when discussing the golf swing, we need to know that the left arm pronates, or rolls clockwise, during the backswing. It makes this motion so that the left arm swings fairly much across the chest in parallel with the shoulder line, rather than up towards the sky.

The right arm in contrast essentially only folds at the elbow and remains fairly neatly at the golfer's side. The wrists bend in response to the folding of the right elbow and the weight of the moving club head. The left wrist forms a slight cup on the backswing as well.



This video should help explain how little the arms have to do on the backswing and simplify your understanding of these terms.

Pronation vs.
Supination



**WATCH
NOW**



1



2a



2b

This is as far back as the hands need to go!

1. Supination
2. Pronation
3. Cupping of the wrist
4. Bowing of the wrist



3



4



Thoughts on Equipment

I want to just say a few words about the evolution of golf equipment. In a nutshell, I am disappointed. Don't get me wrong, today's equipment certainly makes it easier for more people to play half decently than has ever previously been possible. The problem for me though is that equipment has evolved in such a way that it is no longer necessary to develop a truly sound golf swing in order to play half decent golf. You may say "What's wrong with that? It just means that more people can play better than they could with the old equipment" Well, here's the problem. The equipment has evolved in a way to promote a predominantly upright swing. The upright action is, in general, not the shot makers swing and that is the problem for me. Today's game is bomb it, find it if you can, and bomb it again. The shot maker is marginalized in this scenario. The beauty of golf to me used to be that smaller players who had some creativity and shot making skill could compete against much larger and stronger players. They still can, with the right equipment, but there is very little of it available. Moe Norman could basically land his 3-wood on a bed sheet from 250 yards away. Notice that I said "his" 3-wood. With one of today's "off the rack" 3-woods, I guarantee you he could not because it would be too light.

The upright swing is benefited greatly by lighter clubs as well as by offset. The flat lashes made by the best ball strikers and shot shapers, however, are not benefited by this lightness. In fact they are hurt by it. With light clubs you can basically just wave it at the ball and make a reasonable strike. So you can play OK with a mediocre swing, but it is unlikely in the current scenario that we will see another Ben Hogan or another Moe Norman. People are not learning to use the type of equipment that makes that kind of ball striking possible.

With the driver, distance is critical of course. In order to compete you have to hit the ball far. Sometimes all you want to do is hit it as far as you can. With every other club and shot, however, the objective should be to strike the ball accurately at specific, prescribed distance. I repeat "A SPECIFIC, PRESCRIBED DISTANCE". Next, the shot should have an appropriate and predictable amount of spin so that the way it behaves when it lands is known and/or at least predictable. Generally speaking, a cleanly struck iron shot to a receptive green should land, take a bounce forward and stop relatively close to where that first bounce occurred. Spinning the ball a mile backward is visually impressive, but rarely useful. It is with these thoughts in mind that I believe that manufacturers have lost the plot with irons in particular. How far do they really have to be hit?

Now, there is a practical limit to how quickly you can move a club with a flat rotation-



based swing. With this action a lighter club is not moved with significantly more speed because it is a leverage-based swing. Your power comes from your relationship with the ground and not from what I would call “flash speed”. Without getting into the “whys” of this it basically means that within practical limits you cannot swing a lighter club all that much faster than a heavy one with a leverage-based rotational move. You can however, swing a substantially heavier club with nearly the same club head velocity as a measurably lighter club. You might ask “Well, what does that mean?” It means that the shallower rotation-based swing with heavier clubs puts more inertia into the club head, which means less club head deflection when it strikes the ball. Hogan and Moe used heavy clubs with stiff shafts that were basically swung around their bodies. Should the solid sound that their strikes produced be that much of a mystery? Ever hit a nail? A heavy framer’s hammer makes a different sound than a tack hammer, doesn’t it? This is the same with a golf club hitting a golf ball.

To me offset = zero joy!!!

You cannot work the ball properly with offset. I’m sorry, but you can’t. It is the worst thing that ever happened to shot making. An offset club is set up that way to encourage it to close. A good swing then will require a grip and release that holds back the natural bias of the club.

The conspirators are swing weight, overall weight and offset.

Ben Hogan’s clubs were stiff, heavy (in terms of both swing weight and overall weight), flat-lying and open, but balanced with an under sling in the hosel to point the shaft closer to the center of the clubface.

The action Mr. Hogan demonstrates in the 1955 Life Magazine Article on The Secret cannot be executed with a club with offset. The weighting is simply wrong. Today’s clubs are engineered to close. Offset is the culprit. The Secret as iterated in Life Magazine requires that the club have no bias in either direction. The stomach and spine of the shaft must align with the straight-line mass of the club head. Old blades were engineered in that manner. Old Hogan clubs, in my opinion, were balanced as fine as any in the history of the game.





Harry Vardon

*6 Time British Open
Champion and Member of
World Golf Hall of Fame*

Learning From The Best

George Knudson



George Knudson

1937-1989, Winnipeg,
Manitoba, Canada

Canadian golfing legend an influential instructor who won 19 times in Canada and 8 times on the PGA Tour in spite of being plagued with a baulky putting stroke. *"Here is a guy with a million dollar golf swing and a 10 cent putting stroke."* were Jack Nicklaus' words on Knudson.

Whether they know it or not, just about every golfer in Canada who has ever taken a lesson from a PGA Professional has learned something from George Knudson and also indirectly from Ben Hogan. Sir George, as he is known in golf circles here in Canada you see, was one of Canada's finest touring professionals and the CPGA teaching model is designed after his teachings and technique. Who did George Knudson model his swing after? You guessed it - Ben Hogan. So anyone in Canada who has benefited from a lesson has not only their instructor, but also George Knudson and our main man Ben Hogan to thank for their progress.

George Knudson's swing was influenced by Mr. Hogan and his great contribution to the lexicon of golf is his book *The Natural Golf Swing* (not to be confused with the Natural Golf movement) which he wrote with Lorne Rubenstein. Great book! If you have some money in your wallet, pick it up. It is the path that led me to Hogan.

Knudson's method is governed by the underlying principle that the golf swing is ultimately governed by the principle of preservation of balance. Knudson addresses the relationship of physical and dynamic balance and symmetry in the golf swing as well as the notion of balance in terms of one's state of mind. If you have seen my YouTube video about filling a hole in the sky then you have seen the influence of George Knudson on my thoughts about the golf swing. Sir George also believed that the head played no role in the golf swing. It simply went where the body took it.

Around 1989, I was working running a jack hammer and shoveling asphalt in the summer and played a little recreational golf on my way home from work. Every round was a new adventure because depending on what I did that day on the job site I was either worn out or pumped up or even loose depending on whether I ran a jack hammer or a broom that day. Around that time I was reading one of Sam Snead's books. In it there is an image of him expressly saying that holding the golf club was like holding a bird. You want to hold

it firmly enough to keep control of it, but not so firmly that you injure it. Two things were wrong with this for me. First, I didn't know that you would have to hold that bird pretty firm to keep hold of it. Sam grew up in farm country you know. Second, I had no idea how strong Sam Snead was until about 1997 when I shook his hand in Orlando. What a pair of mitts he had. He must have been one hell of an athlete is all I can say. Not as tall as I imagined, but what a pair of hands he had and in his eighties you still could

tell that this fellow must have been one amazing specimen of a man in his prime. Byron Nelson was there that day too and I was astounded by how massive he seemed. Snead's mitts were strong. Nelson's equally so and they seemed like there was no end to them, particularly compared to mine. Huge hands, I tell you.

Anyway, I digress. The point is that John White, who was the pro at Willodell where I was playing at the time, came out to the range to look me over.

He told me I was re-gripping the club at the top. I said I was trying to be passive with my hands and hold the grip like I was holding a bird the way the great Sam Snead had suggested.

John just said "Do you have any idea how strong Sam Snead is?"

I, of course, said "No."

John said, "Squeeze that thing. You will never be consistent without a decent hold on the club; and then he placed my hands on the club the way that was advised by Knudson and he said hold those hands firm and hit that ball hard."

I did what John said and it worked. I have never forgotten that. Years later, I read in the Time Magazine article published in 1949 where Ben Hogan himself said "Relax? How can anybody relax and play golf? You have to grip the club, don't you?" indicating quite clearly the firmness with which Hogan held his implements. With the grip, it is far better to err on the side of firmness. "No floppy-wristed kids stuff" as Tommy Bolt was heard to say.



YOU ARE CONNECTED TO TWO THINGS IN THE GOLFSWING. THE EARTH THROUGH THE FEET AND THE CLUB THROUGH THE HANDS. YOU HAD BETTER MANAGE THOSE CONNECTIONS WELL BECAUSE IT'S ALL YOU'VE GOT.

Mike Austin and the Centers



Legendary long baller. Hit the longest drive ever in tournament play (515 yards at Winterwood Golf Course 1974). His teaching included advanced concepts based on his study of Kinesiology.

Mike Austin

In 1950, Ben Hogan played golf with Mike Austin at Riviera Country Club. Mr. Austin was known primarily as a famous long baller, having hit a 515-yard drive in a regular PGA tour event, which stands as a Guinness Book world record even today. Austin was also known as an instructor of some repute. His knowledge of the mechanics of the golf swing and kinesiology in particular is famous and quite astounding. He could speak with doctors and golf professionals on a highly technical level but also had a gift for “dumbing it down” for the rest of us.

After the 1949 accident, Mr. Hogan was in Los Angeles working as a consultant during filming of the biopic about his life *Follow the Sun*, and also to practice for what he hoped would be a successful return to competitive golf. It has been reported that some of these rounds were played with Austin, who hit a ridiculously long cut shot while delivering the club head from the inside. These are basically the mechanics of the famous “Hogan Fade”, which Hogan had developed years before. The Hogan Fade essentially looks like a draw in reverse. It is quite likely the most unique shot in golf. If you ever hit one, you will know it. It goes out on a rope, and looks like it is going to turn left but it does not move an inch until it reaches its apex and begins to fall. It then falls on a slightly diagonal path to the ground; but it falls to the right, not to the left as you would expect from the trajectory it departed out on. The total drift on the ball is really only 2-3 yards and that drift only happens while the ball is descending. The Holy Grail of shots for Ben Hogan fans is The Hogan Fade.

I bring up Mike Austin for a couple of reasons. One, he used right foot eversion and left foot inversion in his swing, which we will touch on later. But Austin put forward some very unique ideas about the swing plane and how to get the arms onto the proper plane by turning the thumb from the shoulder. He also made keen

observations about the relationship between the movements of the body's center of mass (the Navel) under the part of the spine that is basically centered between the shoulders (the C7 vertebrae). This idea places the effective top of the golf swing quite a ways below the head that so many of us have mistakenly tried to keep so still.

Now, I'm not saying that we should be moving and waving the head all over the place during the swing, but I am saying that there are other things whose centeredness is of much higher importance than the head. Incidentally, when you move the lower body properly under the shoulders and swing the hips

under the center of the part of the spine that is substantially adjacent to the shoulders, the position of the head simply manages itself. In other words, a "still head" is a symptom of other things remaining where they should.

Although others have discussed this, these ideas as expressed by Mike Austin seem the most straightforward. Austin pointed out that the center we swing around is in the back of the body, basically at the top of the spine, and that the center of mass is best thought of as in the belly button. In a nutshell, the further and faster you move the belly button, the further the ball goes. What Mike Austin describes is what I witnessed Jeff Froese do to hit those enormous shots by accident. The hips swung, the body bowed, and the ball was absolutely bombed.

Incredibly, if you load into the right leg and then move the navel targetward you will find that if the body bows as it turns, the hips can turn through nearly their entire distance without a major movement of mass being felt into the left. What this means is that if your backswing retains the weight properly on the inside of the right foot, then you can still be in a position to push off of the right leg long after the transition turn has been initiated. So as the hips shift and turn back left, the mass chases the hips. The hips do not chase the mass into the left leg. This is how Austin moved in transition and this is how Ben Hogan moved in transition, retaining pressure in the right leg felt most prominently in the ball of the right foot.

The question that always comes up is "Look at Hogan. At impact it is clear that he is on the left leg. Look at the hips. Look where he is. In the pictures it is clear that the weight has gone to the left. He has to be fully into the left leg. Doesn't he?"

I answer "Well, no."

They can't believe it and look at me like I am an idiot. Then I ask them, "Does a high jumper's center of mass move above the bar when he executes a Fosbury flop?"

They likely say "Of course. It has to."



I just say “Better check your physics text again.”

The body bends. The body turns. Ben Hogan’s body is bending like a bow. The mass moves, but the mass does not enter the left leg to be felt more strongly in the forward foot than the rear foot until long after the hips have arrived. The mass chases the movement. The movement does not chase the mass. I will say this a few times because it is a concept that you must understand to feel what you need to feel on the downswing. Now don’t get me wrong. There is incrementally more weight being felt in the left leg as the downswing proceeds. This, however, is a progressive build. It is just that it flows there behind the most important parts of the downswing, and again, the weight there is not fully felt until long after the ball leaves. The left leg is in the process of catching you throughout the downswing. You hit into it. Not against it.

At the risk of being redundant I will repeat: **THE HIPS DO NOT CHASE THE MASS. THE MASS CHASES THE HIPS INTO THE LEFT LEG.** The ball is long gone before you are fully into the left leg.

So the swing of the hips motivates and precedes the swing of the club head. As Ernest Jones astutely noted “It is not possible to move the club faster than you can swing it.” It appears that there are two swings and the faster and further you execute the swing of the navel, the faster and further the second swing hits the ball. The first swing is motivated by the legs. The first swing is motivated by **THE MOVE.**

I began to study swing sequences with the thought in mind that the swing of the hips motivated the swing of the shoulders and found it to be universally true in great ball strikers. The long ballers move the navel the furthest and the quickest. Sometimes the navel moves further just because the golfer is big, but there are many examples of smaller golfers moving the middle through large distances and hitting large drives. Tipping the navel also can be used to influence trajectory, but that is a story for another book. The bottom line is that Mike Austin’s ideas tied in perfectly with George Knudson’s chief message that the swing motion was governed by the body’s quest to preserve balance and that the head played no real role in the golf swing. It simply went where the body took it. This means that if the head remains still, it is merely an indicator of the type of motion.

The head is a motivator of nothing in the golf swing. Mr. Austin pointed out that the mass is shifted through the middle of the body. Move the navel and you move the center of mass. Austin’s idea that the center we are concerned

about was at the top of the spine and not in the head also made the manner in which the head moved somewhat irrelevant and that gave Mr. Knudson’s message some added weight.



The Navel



**WATCH
NOW**



The Most Abundant Woe

THE REVERSE PIVOT



“I had a great pair of legs!”

Lee Trevino,
Winner of 6 Major
Tournaments and 5
Time recipient of the
Vardon Trophy

[Golf Hall of
Fame Profile](#)

I want to talk about the reverse pivot now because it is a serious problem with many golfers, and because there have been some suggestions by noted teachers that Ben Hogan actually executed his swing with a reverse weight shift. I will just say now that that is absolutely wrong and I will discuss it later.

There is a reason why the reverse pivot is such a common problem. Everyone is adamantly given advice that they must get to their left side in the forward swing. When you hear someone say “You are not getting into your left side!” you are hearing someone commenting on an effect rather than a cause. It is the effect of the poor move to the right that invariably preceded it. OK fine, in a good golf swing a move to the left on the forward swing happens and must happen, but your first point of concern is getting into the proper position to strike on the backswing and that means moving properly into and around the right leg. If you get this right you will have no trouble getting back sufficiently left. IT WILL HAPPEN. Execute the backswing properly and you will have nowhere else to go but left.

Many golfers are also told to keep their head still at the same time they are being told that they must get into their left sides on the downswing and as a result they simply freeze, resigning themselves to the notion that the best way to make sure that they get into the left side on the downswing is just to never really get into the right side on the backswing. The result is almost always a reverse pivot for the reasons I’m about to discuss.

Swing or toss just about anything and you will notice some things. If you toss a baseball (especially executed sidearm), pitch a horseshoe, throw a bowling ball, shoot a slap shot, or even throw a hay bale, you execute that move by pressuring into the trail leg in a direction away from the intended direction of the toss. Your body and your mind know that to execute those activities efficiently



requires a stable trailing leverage point. You are hardwired to know and feel this from doing it this way to complete so many ordinary motions. The reverse pivot is a product of that hardwired knowledge and instinct. A reverse pivot is a symptom of the body and mind's natural instinct to return to a position of leverage and power in order to move that club. Your mind knows the task it is being called upon to carry out and the body knows and feels that it has no leverage to carry out the task. So the reverse pivot is simply an attempt to regain that lost leverage or create leverage that simply did not exist because it was not created in the backswing in the first place. Again, on the downswing the left side pulls better with resistance in the ball of the right foot and the right side pushes better from this orientation as well. Golf is a two-sided game.

YOU MUST GET SUFFICIENTLY INTO THE RIGHT SIDE DURING THE FIRST PART OF THE SWING. THE BALL OF THE RIGHT FOOT IS A CORE AND CRITICAL POINT OF CONTACT WITH THE EARTH AND THE MOST CRITICAL LEVERAGE POINT ON THE DOWNSWING. IF YOU DON'T GET PROPERLY RIGHT YOU HAVE REMOVED THE MOST VALUABLE POINT OF CONTACT WITH THE GROUND FROM THE ENTIRE EQUATION. THE INSIDE SOLE OF YOUR REAR SHOE IS THE ANCHOR POINT OF THE BACKSWING.

The Reverse Pivot



**WATCH
NOW**



The Requisite Strength

“I just shook a hand that felt like five bands of steel.” That’s what Ted Williams, who perhaps had the strongest hands in major league baseball, said after shaking hands with Ben Hogan.

As in all athletic endeavors, golf requires a certain amount of strength. You don’t need to be a beast to play great golf, but you have to be able to exert some basic control on the golf club and be able to manage it squarely at speed.

If you were to ask the great Ted Williams what is required to be a great hitter, he would tell you that you certainly need to develop your hand-eye coordination, but that the power comes from the hips and speed comes from the hands. The hips do their work in conjunction with the leverage of the feet with the ground.

“To be a great golfer you must be a good walker.” Peter Thomson said it and so did Tommy Armour, as have many others. You must condition your legs. I heard a story about Moe Norman from the late 1950s. He just completed 36 holes and had already beat balls on the range that day, but after all that he was still seen with his tour sized golf bag over his shoulders trudging up and down a steep hill out near the back of the golf course. It looked like the bag was empty, but he had actually weighed it down by filling it completely with golf balls. When asked, he said that this was the best way that he knew of to condition the legs. Operate them as you use them. To Moe the legs were the most important element of the golf swing and I quite agree. Run, walk, hike or whatever for exercise and if you can you should carry your golf bag when you play. It will benefit your swing like you would not believe.

Golf seems a rather pleasant and undemanding pastime but if you want to play 18 holes well, stamina is important. “Fatigue makes cowards of us all” Vince Lombardi said, and it is certainly true in golf. Many great golf rounds fall apart not because the player



Tommy Armour

“chokes” but rather because fatigue sets in, playing tricks with the mind and the body.

I know that I repeat this enough to drive anybody crazy but in golf we are connected to the ground through the feet and to the golf club with the hands. The hands cannot be too strong. You cannot move the club like Henry Cotton or Ben Hogan, or Gary Player or Jimmy Demaret, or Sam Snead, unless your hands have what I call the requisite strength. You should exercise them. In truth, they cannot be too strong because you do not want to ever have to exert them at full force. The best insurance is that they be more than sufficiently strong to carry out their tasks within the framework of the golf swing. You will find that a great deal of the tension in golf stems from the golfer's effort to retain a decent hold of the golf club. You must have the strength in the hands to control the speed that the rest of the body is trying to impart to the club head. If this connection breaks down then all of the other things that you are trying to do will not matter much. The strength you need is simply enough strength that maintaining a firm hold on the club does not feel like you are forming a death grip on it. I feel that the control you want comes from having hands strong enough to have reasonable control of the golf club with about half to three quarters of the force that they are capable of actually applying. If the hands have the necessary strength then you will find that the pressure you need in the hands does not create added tension in the arms beyond the elbow. Many golfers who lack the basic hand and forearm strength find themselves in a state of extreme tension at address because they simply have to try too hard to hold the club firmly enough to move it with any degree of control.

To exercise the hands and forearms do what Ted Williams and Ben Hogan did: squeeze balls. Buy a squash ball, a tennis ball, a lacrosse ball and a racquet ball. Squeeze them as you watch television. Work with your fingers and keep at it until you feel a burn in the hands and the forearms. These little workouts you will never regret and they are easy to do because you can carry them out while you are doing something else. I used to do this all the time. In my opinion it is most valuable to switch balls and use them in intervals because you want to develop hands that work and are capable of exerting pressure in a variety of orientations. It is also valuable to exercise the hands with the wrists held in both cupped and bowed positions to develop strength in the hands while being operated in a variety of postures. The different sizes of ball help make this happen as well.

Beyond these little things swing whatever you have around the house. A corn broom is great because it provides great weight and resistance and swinging not only helps the hands and legs but works the core of the body in the same manner that the golf swing requires. You can buy them bigger as you get stronger and when you are not swinging them around the backyard you can clean the floor with them. The biggest benefit of



swinging a corn broom is you can hear it whoosh. This tells you where you are putting the most speed into the motion. It should whoosh just past the bottom of the swing.

These are the basic points of strength that will be most beneficial. If you want to take it to another level with a professionally designed all-body workout, by all means do, but do not neglect the hands and forearms, the legs and the core muscles and make sure that whatever you are doing that range of motion and flexibility is an addressed concern in your workout program.



The Secret in the Dirt



“Anyone who can walk can play golf. It is a walking game. To be a good golfer, you must be a good walker; you must condition your legs.”

Peter Thomson
5-time British Open
Champion

[Golf Hall of Fame Profile](#)

Golf is a two-sided game and swinging a golf club is in essence a whole body endeavor. The thing to realize is that on the downswing, the left side (presuming the golfer is playing from the right side) pulls better if afforded resistance in the ball of the back foot, and the right side pushes better from this orientation as well. Lose this leverage point and the swing must stall. Only a timed release or a hold off move can save the swing at this point.

This is not, however, how the greatest ball strikers like Hogan or Moe or Trevino, Jones or Snead swung the club. In their methods leverage is never lost until the ball is gone. The club head is swung and unwinds through a constant swinging thrust rather than a flip. The club head passes the hands very late and a good ways past impact. The hands do not fight the golf club. The hands do not hold back the release.

In fact, they do not hold back anything at all. On the downswing, the hands are thrusting at a constantly accelerating rate in conjunction with a whole body rotational thrust that is grounded and turning off of the body's right side. You feel this as a turn off of the ball of the back foot moving into the forward leg. Whew! There I've said it! Ben Hogan and the rest of the best ball strikers in the history of golf swung and hit off of the back foot!

Del Starks turned me on recently to a comment Jimmy Demaret made about how sore his right foot and entire right leg really was if he ever took more than a month off and then got back to practicing. According to Demaret that was where the power came from.

When I talked to Moe, I said, “Moe, your downswing really looks like it goes ‘down’. What’s the stretch on the downswing about?”

“The only way I can push that far is to go down.”

Note to self.... “The downswing is truly down!”

The engine of the golf swing is the legs and the core of the golf swing is a grounded turn.

The legs are your core source of stability and also the motor of the golf swing. Today, however, the proper use of the legs is rarely taught. In the modern method, the legs are treated merely as stabilizers and servants to the action of the body. This is completely backward. If you get the legs moving correctly you will invariably clean up the action of the body. Tommy Armour told us this more than 50 years ago, as did a host of other great teaching pros, and it is unshakably correct.

As previously noted, golf is a two-sided game. I am not a fan of any method that fails to acknowledge this. The transfer of mass is one of the fundamental elements of the golf swing. You feel this proper transfer of mass in the feet and you motivate it with the rotation of the hands, arms, shoulders, hips, and torso. It is the action and movement of the hips that are the governor on the back swing and the motivator in transition. You transfer your mass by moving the hips. This action requires the leverage provided by your connection with the earth and the action of the legs and feet. You do not turn the hips with the core. You turn the shoulders with the core whose action is ratcheted against the pull of the hips. The pull of the hips is leveraged against the ground! **THE SECRET IS IN THE DIRT!** You turn the hips with the legs. The legs are not servants to the swing. They are the master, the motor and the motivator. The legs move the mass. The action of the legs from the feet right up to the buttocks is what we use to turn the hips. **THE LEGS ARE THE ENGINE.**





Ben Hogan

*9 Time Major
Championship Winner and
Member of the World Golf
Hall of Fame. Believed by
most authorities to be the
greatest ball striker in the
history of the game.*

HOGAN

BEN HOGAN

FIVE LESSONS - THE MODERN FUNDAMENTALS OF GOLF

"TO HOGAN
THE SWING IS
A CONNECTED
WHOLE."

We are not going to paraphrase Five Lessons here. If you don't know anything about the book, it is simply a mechanics book illustrating and giving a detailed roadmap of the grip and stance and breaking the swing into two sections which Hogan called "The First Part of The Swing" and "The Second Part of The Swing". My take on this is that he wanted to emphasize that to him the swing motion as one connected whole rather than a separate backswing and forward swing. Simply titling these chapters "The Backswing" and "The Forward Swing" would not have had the same effect. TO HOGAN THE SWING IS A CONNECTED WHOLE.

The goal of much of this book is to try to provide a better understanding of how and why little parts of Hogan's action added up to one superior and brilliant connected whole.

"What things did Hogan build into his address that could have automated his action and eliminated the need to time elements of the swing?"

This is the part of the book where we start to try to piece together why Ben Hogan was so ridiculously good at hitting golf balls. Hogan is famously quoted as saying things like "I dug it out of the dirt." or "The secret is in the dirt" or "It's in the dirt, go dig it out yourself." It's been paraphrased a million different ways too. Most people just leave it at that and assume that he was just saying "Go out and practice your ass off and you just might get it."

I don't go along with this overly simplistic explanation. Other people since Hogan have worked just as hard and have had access to better equipment and instruction than Hogan had at his disposal and yet no one has gotten to that level of perfection in ball-striking with the possible exception of Moe Norman. So, I am compelled to conclude that there must have been something more to it.

I believe that Hogan was a genius and it would seem that the answers that Hogan gave to a series of IQ test questions that Gardner Dickinson administered to Hogan over time would most certainly confirm this. I believe also that many of the phrases he repeatedly used were purposefully loaded with cryptic and/or dual meanings. If you think about it, that way Hogan could tell you the secret without really telling you by sort of handing it over in disguise....a good way for an otherwise frank and honest person to manage a secret.

To find our answer we have to look at what he said about the golf swing and what he did in his golf swing, by studying photo's and video, and also the thoughts of his contemporaries on what they may have thought or noticed about Hogan. We have to find out what he did that was different.

What We Know

First Hogan swung the club flat on the backswing. When I say flat I am talking about the position of the arms relative to the angle the shoulders are turning on. In his prime the club went basically right across his chest on the backswing and rarely got above the plane of his shoulders. Part of this was just dictated by the depth of the arm swing. Hogan's arm swing had width but stayed a good distance from the body. The arms did not collapse in and lift. His hands went back on a wide arc but a very shallow backswing plane and basically never got much above the right ear on the backswing.

Hogan had no pause in transition. In fact Hogan looked like he began to bend the body and slide the hips back to the target long before he had completed his backswing. The body bend achieved the plane shift he talked about in 5 Lessons. Some have wrongly suggested that he had a reverse weight shift, but that is completely wrong. Hogan used a back shift to accomplish the look we see in the pictures. Bobby Jones and many others used a similar transition move, but Hogan's back shift was a little different and I will talk about it more later.

Hogan had a weak left hand grip and importantly advocated use of a modified Vardon (overlap) style grip.

There was very little deviation between Hogan's backswing plane and forward swing plane. There were two planes, but they were very similarly inclined with the downswing plane pointing slightly to the right of the target line just as he outlined in 5 Lessons.

Hogan used heavy clubs with flat lies and swung very fast and very flat without a loop in transition and the reversal or transition of the swing initiated early (ie long before the hands and club had finished their trip on the backswing). His swing was characterized also by a vertical drop or body compression in transition (a trait also of Sam Snead and Moe Norman).

The club weight, flattish plane and cupped left wrist resulted in what looked like a freakishly impossible angle between the left arm and club shaft in transition. Part of the appearance of this angle was real (that is, it was a deep angle), but part of it was also illusion created by the low hands at the top position relative to the camera angle he was usually photographed from. This deep angled appearance varied greatly when compared to most of his contemporaries who of course were filmed from the same position. If photographed from above, however, I believe that this angle would have looked far more human.



By all accounts at address it appeared that the shot was basically done. It appeared as if once Hogan's setup was complete the swing would automate and time itself. This is the key thought that has driven my analysis. What things did Hogan build into his address that could have automated his action and eliminated the need to time elements of the swing?

Hogan used eversion of the right foot meaning the heel releases targetward through impact as opposed to just turning and lifting up. He also used inversion of the left foot as he moved into the left leg to the finish.

Hogan claimed that he rolled the club open on the backswing and rotated it like a baseball bat. (Nick Seitz interview 1985)

The Secret revealed in Life Magazine was Hogan's method to hit a fade and eliminate a hook. Cup the wrist on the backswing (Life Magazine August 8, 1955). Hogan used left arm pronation on the backswing to move the club to the top of the swing without a loop. He used a combination of supination and cupping of the left wrist through impact. (Five Lessons)

The right foot was square to the line at address and the left foot was flared and he insisted on these issues as fundamentals with the same force that he advocated the Vardon grip as the best at the time he wrote Five Lessons

When speaking of Hogan we also have to investigate why he felt compelled to have extra spikes added to his custom Maxwell shoes and in particular under the ball of the right foot. We need to also understand the slip at the 18th at Olympic – The smoking gun that pointed to the importance of right foot traction in Hogans swing.



LEARNING TO LEARN

"Ben Hogan wanted to know how absolutely everything ticked. He wanted to know what made other golfers swings tick. Not just his own."

To learn something is more than to understand something that is being taught, demonstrated or shown. It goes deeper, involves more and in the end is infinitely more fulfilling. Search and inquiry is involved. Questioning and wondering is involved. Most of all application and evaluation is involved. The mind and the senses are engaged.

As I researched Ben Hogan, his contemporaries and peers and the instruction of his day it astonished me to find out that the ball beater and "self made" golfer took lessons from so many and gathered information from such a wide variety of sources on his path to mastering the golf swing. Bill Mehlhorn, Sam Byrd, Henry Picard and Mike Austin are well know examples of golfer/ instructors that Hogan turned to for assistance at different times in his career. Hogan also took much from studying the actions of his contemporaries Snead (whose swing he admittedly envied), Nelson, Demaret and a host of others. Ben Hogan wanted to know how absolutely everything ticked. He wanted to know what made other golfers swings tick. Not just his own.

Through talking to others and studying others, in a way, the golf swing used to be passed on almost like a folk tale but those who knew the tale knew it well and the tale was true. Today, not so much I'm afraid.

Hogan's method of learning was an intense combination of reading, listening, observing and then testing and ingraining. Hogan did this and never stopped this because it is fulfilling and it works. Moe Norman did the same. Trevino as well!!

Hogan used to go to the movie theatre in his home town where his future father in law was projectionist and when the audiences had left studied both films and news reels of the great Bobby Jones and also watched Walter Hagen, Gene Sarazen and others.



Hogan wanted to learn from the mechanics of other sports like baseball. Former New York Yankee and professional golfer Sam Byrd gave Hogan lessons. Hogan approached Byrd after watching him finish 2nd to Byron Nelson in the 1945 PGA. Byrd had learned much from “Wild” Bill Mehlhorn and is the only person to have played in both the World Series and The Masters. Walter Hagen was also known to have taken much from baseball and in fact had considered a career in professional baseball at one point.

Ben Hogan even took time out to talk about the science of the swing with “The Splendid Splinter” Ted Williams, the greatest all around hitter and student of hitting in the history of baseball.

Hogan’s journey included intent study of balls and equipment. He researched all of this with enormous interest and passion often taking days to pour over and put together a set of clubs at the MacGregor factory. It drove Tony Penna and others in the club department at MacGregor half way round the bend.

Why I am saying this is that I want to impress upon you that there was a vast array of sources that Hogan researched before distilling all of it down into that incredible swing. This is the search and inquiry phase and in reality it is an attitude that need never end. This is the necessary research that leads to a theory, but the theory must be tested, and Hogan did that through mind and muscle numbing practice sessions.

Hogan



**WATCH
NOW**



The sessions were more than test and ingrain, test and ingrain, test and ingrain. There was a point to hitting that many balls. He not only wanted to find out what the ball did, but he also wanted to monitor what his body did.

How his body and mind changed throughout the session. How did it react to pressure? How did it react to heat and cold? How did he hit it when he was fresh and what happened as he got tired? Hogan answered these questions both on the practice ground and of course on the golf course where experience of course is the best teacher of all. Hogan was intent on recreating the pressure of competition even on the practice tee at least as best as he could. Why not practice in the rain? You play in it. Why not hit balls until you are exhausted? You get tired on the golf course. Don't you? You could simulate the feeling of that in other ways also if you wish. The point is to learn to be aware.

Jimmy Demaret once ran into Hogan late at night on the driving range where Hogan was still ripping balls after many many hours and also after having shot a very low score that day. Demaret asked Ben "What the hell are you doing Ben? We've been in the clubhouse for hours. You must be exhausted."

Hogan said "I want to find out what happens to my swing when I get this tired."

BEN HOGAN LEFT NO STONE UNTURNED and that is the nature of mastery.

Now it is not necessary to go to the extremes that Hogan went to to improve at golf, but it is good to know what he went through because knowing it reminds us that very few people have ever deserved to play golf as well as Ben Hogan did. He earned it.

Fortunately we need not reach Ben Hogan's level of proficiency in order to enjoy the great game of golf.

In this book I am presenting a theory that I tested myself many years ago and gained great satisfaction from. I taught myself to make a golf swing that still stands up reasonably well today in spite of packing on a few pounds and taking 9 years away from the game. My study came from a multitude of sources in the same way that all things are learned, but the most important part of the learning process is the part where the theory is tested and ingrained into the mind and body.

The beauty of golf is that we have such a wealth of experience to draw from. We are also fortunate that the thoughts and deeds of so many great players were written down for us to study and make our own. In other words by taking of their experience we need not travel down each and every path both dark and light. They have lit the way, but we must still set foot on the path in order to know it.



So it is our privilege to be able to make a careful study of the greats who have come before us. When you get it right it goes deep into your senses and like Ben Hogan said “You feel a great shot in your heart!”

Now, before you run out and start to get all weird and try to hit shots with your heart you are going to have to start with something else. You start with your gathered information and experiences and relate them basically to sight, touch and sound. LOOK, LISTEN AND FEEL. I haven’t figured out yet what a great golf shot smells or tastes like, but if I do I will definitely be back to you with it. Perhaps a perfect golf shot smells and tastes like a Chesterfield cigarette?

When I say LOOK. I am talking about looking at everything. Look at your grip. Look at your posture in a mirror. Look at it on video if you can. Look at the target. Look at the sky. Look at your lie and the condition of the turf. Get in the habit of really taking note of these things and evaluating them and taking them all in.

Finally when you strike each shot watch the ball in flight. Watch it from start to finish. Experience the entirety of the shot. Observe and note everything you can take in about the shot. The goal is to experience that shot as completely as you can. I advise this because it shortens the time to improvement. The more completely you experience the shot and all of the accompanying sensations the more likely you will be able to replicate it when necessary. Remember there may be a time when hitting even a duck hook or a wicked slice is the only way out of a particular situation. You may actually need to hit a bad shot on purpose. Recalling how you used to hit those shots is what you will need to do if you are going to make one happen on purpose.

When I say LISTEN what I am talking about is basically two things. First, is to listen to the sound of contact and relate it to the feeling in your hands and body. Toe and heel shots have a sound and a feel. Thin and fat shots likewise. The sound is another thing to ingrain as part of the shot. There is much talk about visualization and for good reason. It works. The more totally you experience the shot including the sound of what you are trying to create the more complete a picture your mind has to carry out and replicate it. This isn’t just airy fairy stuff. Visualization works. It is just a part of the deal.

Now I want to turn to a second and actually more practical use for the ears....Hearing the speed at the bottom. Practice swings are sort of like air guitar I guess, except that the whizzing club makes a sound and it intensifies at a certain point and you are solely responsible for that sound. That point better be at the bottom through and past the ball. You want to be accelerating through the ball. Go into your back yard or park or wherever you can swing a club and practice making it sing at the bottom. The best way



to work on your Sequence of Motion is by making swings and listening to the speed you are creating. Don't worry about how much speed. Work on where you are creating the speed. You want your speed at the bottom and "through the ball". This is one of the best things that you can work on away from the practice range. Don't just take willy nilly practice swings. Work on where you are creating your speed in the swing. All you need is a place to take a swing. This type of practice is free and yet infinitely valuable.

Once you have a handle on creating speed in the right place then you can start to ramp up the velocity. The volume and pitch of the whoosh of your air swings will increase as you learn to move the clubhead faster in the right place. You ramp it up by executing the proper transition and downswing sequence of motion that puts the speed at the bottom faster. Not harder, faster. Speed is what you are looking for if you are looking for distance. You can hear the differences in the speeds you create. Just always remember that you not only want speed, you want it in a particular place. You want your speed at the bottom.

The last thing that we must ingrain and note is the feel of things actually the feel of everything. Being aware of our balance and posture and the feel of gripping the earth with the feet and the feel and balance of the golf club when held and swung properly. The pressures in the hands and fingers and forearms in transition. What it feels like to pressurize the shaft and handle for the full ride from the top of the backswing to the finish. What does balance in the finish feel like? Hold your finish and relate the feeling of it back to the result that you are watching. The goal is to experience and understand the shot as completely as you can.

You work back from the result when you practice to ingrain the motion that preceded the desired result. When you hit one great. really, really savor it. Take it in and try to ingrain the feeling of it. Don't just plop another ball down. Ponder a moment. Try to ingrain what you did. After a great shot Moe Norman would often say "What'd I do right?" By figuring out and reminding himself of the feeling of doing it "right" he just got better and better at doing it right. Always think hard upon what you did right.

I have heard that after each practice session Ken Venturi would come into the clubhouse and lay on a bench and close his eyes. He would spend that quiet time thinking about those practice sessions and internalizing the feel and totality of what he had been doing. This is the sort of thing that you must do to experience a deeper level of learning.

Information can be shared and taught, but the learning part is much different. It requires a committed application of what you know and a simultaneous evaluation and



ingraining of your efforts to apply that information to your golf swing.

Commit yourself to a deeper level of “feeling” and “experiencing” what you are doing and what you “think you understand” and you will give yourself an opportunity to experience a deeper level of learning. Perhaps deeper than you have ever thought possible.



WHAT YOU NEED TO KNOW ABOUT PLANE

Hogan's Sheets of Glass

In Ben Hogan's book, *Five Lessons: The Modern Fundamentals of Golf*, there is a great and famous image of sheets of glass defining the planes of the backswing and the forward swing. There is no question that Mr. Hogan's Sheet of Glass image from *Five Lessons* revolutionized the way we think about the swing arcs and the path that the arms and body take in the golf swing. It is one of the most simple and powerful illustrative concepts ever put forward in golf literature.

"The club head travels on one path on the backswing and a different path on the forward swing."

That said, I question its worth when people take it beyond Hogan's original illustrative intent. We can talk and expound on plane theories till we are blue in the face and the practical reality is that it won't help most golfers a lick. My contention is that golfers need only know that the club takes one path on the backswing and a shallower path, directed a little bit from the inside toward the ball, on the downswing. That's all that Hogan's sheets of glass are really indicating. Hogan claims no ideal but says that moving above the sheets courts disaster. What this means is that where your arcs travel optimally, relative to the sheets of glass, is your business. To imagine it in the simplest terms, I recommend that people just consider that there are two planes for the simple reason that you have two things to swing around; the back leg on the backswing and the front leg on the forward swing. That's it. If you are inclined to analyze this to death to find some conceptual ideal, or what I prefer to simply call arc tilts, I recommend devoting that time to practicing your putting and you will lower your scores much faster. Be aware of the plane concept. Know and understand its significance and then don't dwell on it.

The thoughts and notions famously put forward by Ben Hogan in *Five Lessons* about plane have both helped and hindered modern



golf teaching. The reason for this is that the idea of plane, in general, has spawned entire golf movements driven by theorists who put stock in what is best utilized really as just a visual image put forward by Hogan. In reality, there are multiple, perhaps infinite, relevant parallel planes to be considered in the golf swing, but to think and understand what you are doing in this true context of plane is a waste of time. It is entirely too complicated.

The planes that Hogan describes really are nothing more than describing the tip or tilt of two arcs traveled by the arms/hands and the connected golf club. The sheets of glass represent an acceptable or “safe” limit of where the backswing arc travels and shows how, on the forward swing, the angle of the sheet alters to angle upward and to the right; indicating the inside path of the club head and the steeper angle of the tilt of the sheet of glass on the forward swing. The club head travels on one path on the backswing and a different path on the forward swing. There is a backswing arc and a forward swing arc. The tilt of these two arcs is generally referred to as the planes. Hogan’s feelings on plane were actually quite simple. It boiled down to this. There is a backswing plane and a forward swing plane, both of which your swing must remain on or beneath. The sheet of glass on the backswing is angled squarely to the ground from the ball through the top of the shoulders in Hogan’s illustrations. The downswing plane is tipped slightly up and to the right.

So called “One Planers” have a smaller deviation between the tilt of the backswing and forward swing arcs than “Two Planers”.

In the simplest terms, I have put forward that there are always two planes because a golfer has two things to swing around. The back leg anchors the backswing. The golfer moves into the front leg on the forward swing motion. These are the pivot points in the golf swing. The swing of the hips moves the mass of the body between two anchor points - the back leg on the backswing and the front leg on the forward swing. Rotational swingers have a smaller deviation between the tip of the backswing arc and the forward arc. This is what we hear described “One Plane” swings. Lateral swingers move differently into the right leg on the way back and rely on a different set of body adjustment to get onto the downswing arc.

All good golf swings move away from the back leg and into and around the front leg in a similar fashion with similar angles of approach. The backswing arc and how the club is motivated or moved onto the downswing arc by the actions of the body is the difference to be noted between the two still broad categories one and two plane swings.



LAG AND THE GRAND ILLUSION

"Lag is the product of acceleration. That acceleration accompanies any swing executed in proper sequential order from the ground up."

The point of discussion for this little chapter is clubhead lag; The holy grail of the golf swing. That magical phenomenon whereby the clubhead appears to be held back late in the downswing with the wrists stretched into an impossible almost contortive (I just invented that word) angle until it finally and miraculously and just in the nick of time releases imparting a ferocious lash of clubhead speed to that helpless little golf ball which is then compressed and propelled at velocities that it has previous never experienced.

B-A-L-O-N-E-Y

OK maybe it is not complete baloney, but the point that I want to make and the thing that I want to express is that when discussing lag we should not be talking about an angle or wrist hinge and more importantly we should not be talking about holding lag or holding the angle or retaining this or that, because lag is an effect. If you are holding an angle or you are trying to let an angle deepen because you are allowing slack to enter the equation then you are creating what I call false lag. You are creating an angle with no pressure. Pressure being the operative word and the imperative element. If you are moving the body properly the goal of the downswing should be to get rid of the angles you created on the backswing and in transition not to try to artificially hold them. The catch is that if you are using the ground well and moving the body properly you are creating pressure in the handle that you are not strong enough to overcome.

Lag is the product of acceleration. That acceleration accompanies any swing executed in proper sequential order from the ground up. The clubhead trails because the hands and arms simply cannot deal with the pressure being thrown at them by a strong pivot and driving rotational body motion.

I discussed this with John Erickson and I would say that I have never felt so much on the same page with a person when talking about lag as I was the first time I discussed this with John. John, like me, also had many talks with Moe.

If you want to find John search for Lagpressure on YouTube or at the iseekgolf.com forum. John is a former tour player and protégé of Ben Doyle and very knowledgeable about TGM and its author Homer Kelly. A proponent of the goals of the traditional rules of golf association, John is also the last player to win an international professional golf tournament with a persimmon driver. You can also find him at Advanced Ball Striking and he also makes frequent contributions to the Secret In The Dirt forum. Anyway enough about John. You now know where to find him.

What I would like you to take away from this brief discussion about lag is that you want to feel that the shaft is being pressurized during the entirety of the downswing, past and through the ball. If you have managed to accelerate and drive through the ball without that shaft depressurizing until the ball is gone then you will have created all the lag that you need and more. John's handle is LAGPRESSURE because he clearly knows that it is not the angle of the wrist hinge that counts, but rather the retention of pressure in the shaft to and through the ball that matters. You need to focus on creating pressure not angles. If you create pressure in the handle the angles will be present.



Now on to wrist hinge. Be very careful in your study of photos and video, because evaluating the angle from a single direction tells you very little because the camera angle relative to the plane of the swing can set us adrift

in our understanding. You see a laid off club on a shallow plane can give the appearance of an impossible wrist hinge and mind boggling lag. There are many photos of Ben Hogan in which it seems as if we are witnessing an inhuman angle, but I can assure you that Ben Hogan was just an ordinary man with very strong, but otherwise ordinary wrists. Above is a picture of me at nearly identical points in the downswing taken from two separate camera angles. The wrist hinge in the photo on the left is quite impressive. Look at that lag!!! I couldn't be more proud. Oh, but wait, when we look at the picture from the other camera angle that incredible wrist hinge angle is gone. What happened? Nothing. It's just that in the first picture the hinge is tipped in a different direction relative to the camera. The enormous angle wasn't enormous after all.

To illustrate a little further, below is a video that I made over the winter to show privately to a few people to illustrate how we can be fooled by camera angles. It also illustrates the dangers of drawing lines on video. It is true that Hogan did have a deep and full wrist hinge, but we must be careful to note that we are not always seeing at what we think we are seeing. I am also not trying to knock video analysis. Rather I just would like to give people a little bit to think about before they start to draw all of those lines. Enjoy.

Hogan Angles



**WATCH
NOW**



THE HOGAN PIVOT



“I never saw Ben Hogan ever come out of a shot. Never!!”

Jimmy Demaret

3-time Masters

Champion and World Golf
Hall of Fame member

[Golf Hall of Fame Profile](#)

Most of you reading this will know that Ben Hogan was in a horrific car accident in 1949. His car was struck head on by a Greyhound bus. He nearly died. That accident is recounted in a number of books and so, for the purposes of my little book, we only really need to be aware of what his injuries were. This is because the injuries are one of the keys to understanding Mr. Hogan’s pre-accident and post-accident golf swings. The injuries were principally to the left side of his body. Apart from the internal injuries, Hogan had a crushed pelvis and a completely crushed left leg. He also broke his left collarbone and damaged the left shoulder. Word is he had four or five subsequent surgeries on that shoulder over the years, but basically all we need to know is that it was never right after the accident. Lastly and importantly the vision in his left eye was never right after the accident.

If you haven’t watched the 1951 Hogan biopic *Follow the Sun*, with Ann Baxter playing Valerie Hogan and Glenn Ford playing Ben, you should get your hands on it. It is pure 1950s saccharine, but Ben Hogan oversaw the production and taught Glen Ford how to hold the club, among a few other things. Ford still looked pretty inept, but the movie is still a great reference. For one thing, there are some neat cameos by Cary Middlecoff, Sam Snead and Jimmy Demaret. What a great action Demaret had. Also notable, is that Mr. Hogan made his own swings, which show the most immediate post-accident swings on record. As noted earlier, many of the swing sequences were filmed at Riviera Country Club in Los Angeles, where it is said that Hogan played a number of rounds with the long hitting Mike Austin. Austin bombed it with a fade delivered from the inside and Hogan picked his brain both around the time of the filming and prior to his return to the tour. Hogan used his encounter with Austin in much the same way he did with the likes of Byron Nelson, Henry Picard, Sam Byrd, Sam Snead and countless others who he played with or otherwise came into contact with

over the years. Hogan, by all accounts, was a probable genius and a great observer and student of golf swings in general, not just his own.

Anyway, there is one particular exchange in the film that always interested me.

Shag Boy: *“Gee Mister, you haven’t played much, have you?”*

Ford (as Hogan): *“Not lately.”*

Shag Boy: *“There’s something wrong with your legs. You don’t pivot.”*

The boy demonstrates and says: *“You shift from left to right and then back to left. It’s all in using your legs right... You should have a pro teach you the fundamentals.”*

Ford: *“That’s what I need alright, son. Thanks for the lesson.”*

Ford then tries to pivot and falls down. Ann Baxter, as Ben’s wife Valerie, then comes to the rescue in their Cadillac I believe, and we’re back to the Hollywood version of things.

I bring this up and point out that Hogan was overseeing much of the film and this particular interchange was no doubt either scripted by Hogan or at least carefully scrutinized by him during filming.

There has been an idea put forward that Hogan had a reverse pivot. That is just about the most ridiculous thing that I have ever heard. It is absolutely unbelievable and just tells me how poorly understood his action has been. When I first heard this put forward it actually made me kind of angry.

HOGAN USED A BACKSHIFT!!

This is the same move that Bobby Jones and many others of that era used. Hogan used all caps in Five Lessons to make special note of things and I will do the same here and, at the risk of redundancy, I must repeat:

HOGAN DID NOT HAVE A REVERSE PIVOT. HOGAN USED A BACKSHIFT!! A BACKSHIFT IS THE FARTHEST YOU CAN GET FROM A REVERSE PIVOT!! IT REQUIRES YOU TO TURN SO FAR AND FIRMLY INTO AND AROUND THE RIGHT LEG THAT YOU GET THROWN BACK LEFT AND TARGETWARD THROUGH THE RIGHT HEEL!! THE BEHAVIOUR OF THE RIGHT FOOT IN THIS MOTION IS CALLED EVERSION AND THIS IS THE CRITICAL PART OF THE MOVE AND MECHANISM THAT HOGAN USED TO AUTOMATE HIS TRANSITION!!

MOE NORMAN RELIED ON THIS SAME PHENOMENON TO AUTOMATE HIS TRANSITION.



I was in the parking lot at Brantford Golf Club in Brantford, Ontario and ran into Moe. I asked him about what he called “swinging into the golf course”. I said “Moe, when you say ‘into the golf course’ you don’t just mean out there,” as I pointed down an imaginary fairway “you mean down there” as I pointed to the ground.

“Why sure”, he said.

“Do you turn that (right) foot into the ground?”

“Yes.”

“Clockwise?”

“Yes.”

“All the way.”

“Sure.”

“Does the feeling stop?”

“No. No. You keep it going. Forward and down swinging into the golf course.”

“Is that what Hogan did.”

“Why sure.”

“Is that why Hogan had that extra spike?”

“He’s not telling, not telling. No, no, no, Hogan’s not telling.” Moe said with sort of a wink and a laugh.



THE SIXTH LESSON

UNDERSTANDING FIVE LESSONS AND HOGAN'S SECRET

“Study the shading in the entire downswing sequence on pages 106-107 for instance and you will understand exactly what Hogan felt...”

To figure out the totality of the Hogan Secret you basically need only the 1955 Life Magazine article, Ben Hogan's Five Lessons - The Modern Fundamentals of Golf, the Nick Seitz interview from 1985, and George Peper's interview with Mr. Hogan published in Golf magazine in September 1987. You need to understand that none of the things that Ben Hogan said will apply if you do not get the pivot right. The pivot is the key and it comes from the ground, THE DIRT if you will, and is the engine of everything else that happens in Ben Hogan's magnificent swing. It is for this reason that I have always believed that Hogan meant more when he told people "I dug it out of the dirt, you should go do the same." "The Secret is in the Dirt" was not just Ben Hogan's flip-off line. It was in fact the final cryptic clue to pull it all together. Ben Hogan believed in work and certainly believed that what he had learned should be earned. The Secret in the Dirt held many references for him, most certainly ranging from the death of his father to his own constant toiling on practice ranges. But it was his physical relationship with the ground that kept the engine humming along.

One other thing to note is that you cannot "get at Hogan" until you accept and believe that Ben Hogan told the truth about what he did and what he felt. He may have made you work a little to get to it but he told the truth. You will have to search for the truth in his words at times but you must know that it is always there. He is making you work for it. This was a part of his great intellect and his genius.

If you want to understand Hogan and The Secret and Five Lessons, understand also that he had Anthony Ravielli shade areas darker in several sequences to indicate and emphasize where Hogan felt the weight and pressure. The shading in many sequences goes quite obviously beyond the needs of artistic effect. Study the shading in the entire downswing sequence on pages 106-107

for instance and you will understand exactly what Hogan felt on the downswing. The shading tells the story and will give you a very good idea of what Hogan felt. There are other instances of this throughout the book. You should look for them.

The most important thing to accept and know is that Hogan hit off of the ball of his right foot. His turn was executed off of the right foot as well. He contends that he was a better ball striker in 1948, before the accident, than at any other point in his career, but his contemporaries like Cary Middlecoff countered that Ben Hogan was never better as a ball striker than he was after 1950. I think that we can accept both ideas without compromising our perception of his method. What is certain is that Hogan entered the most prolific point in his career in terms of major titles at a point when, for all intents and purposes, the left side of his body from ankle to shoulder was almost completely compromised. With this in mind I am certain that, had he sustained the same injuries to the opposite side of his body, his days as a champion golfer would have been over.

Along with the entire right side, the right hand provided much force as he told us explicitly in Five Lessons. “3 Right Hands” is what Ben Hogan wished he had in the hitting area. Understanding Hogan’s right hand grip, as depicted in the 1955 Life Magazine article, is the key. In the grip, only the right hand is on the shaft in what you would call an optimum biomechanical position. The left is set up to be exactly the opposite. It is in an optimum position to perform two separate roles. The first is to keep the club in a poor position to be leveraged in transition; the second to turn the handle as he gets to the bottom of the free ride when the hands come down. At that point he turns the handle and thus “trips the shaft” and forces the left hand to bow, putting the right hand automatically in the optimum hitting position. At this point, he is pressuring the shaft on the top and bottom with the thumb and forefinger of the left hand. The bottom three fingers (pinky, ring and middle respectively) are relaxing compared to the hold they had on the club at the top and on the way down. The right hand works now exactly as he demonstrates in the Coleman video, simply powering straight through.

The point of the grip is that the left hand is in a low leverage position for basically the entire backswing so he can start back to the ball with everything he’s got. He is swinging from the top but the club head cannot come over the top nor do any other similar thing, because of the position of the left and right wrists. Instead, the club appears to simply lag because the left hand is in no position to pressure the shaft. At the bottom of the “free ride” that Hogan describes when the hands are about waist high, he simply turns the handle as he told Nick Seitz and George Peper, and puts the shaft briefly in line with the left wrist by simply turning it. Then Whoosh, Boom! As I said, I call this “tripping the shaft” and I have done it for years. Moe did it too, but from a different position. It is



this “trip” that makes the incredible Hogan whoosh at the bottom. Everyone looks for Hogan to be rotating the shaft in transition or in the impact area and so they simply will never see it because it is not there.

He rotates it right where he said he did in Five Lessons (at the bottom of the free ride). When he rotates it here, it moves immediately into a position precisely square to the arc for the rest of the ride through the ball. Remember, he told us that you have to square the club with the left hand. That again is exactly what he did.

The Secret



**WATCH
NOW**



If you trip the shaft from the top you come over the top. Trip it while onto the left side and you will smother hook the ball because you are tripping it just as you are about to stall. You have to trip it at the bottom of the free ride and while the mass and pressure is still right side. This is why people who are trying to get to Hogan by getting to the left side early will never, ever get there. It is the simplest move in the world and capitalizes on the bias of the club itself, if the club is properly balanced. Modern clubs have offset and are biased to close. Hogan’s clubs had no bias in either direction and so the pulling forces created by the club head’s own mass and velocity meant it would pull squarely if you used it correctly and pressured it properly. In an old blade, the toe wants to pull. Ben Hogan used this effect to his advantage.

Hogan used his body like a bow. The middle turned and bent and moved toward the target, but the mass chases the turn and this pressure stays long on the right leg. The turn does not chase the mass. Just as a high jumper’s center of mass need not rise above the bar in order for him to clear it, Hogan does not have to be well into his left side simply because it “appears” that this is so. It is not so.



Remember: THE MASS CHASES THE TURN!!

One more thing to notice: Note that the back of the left shoulder is white in the drawings indicating no or low pressure. Ben Hogan, of course, had a bum left shoulder after the bus accident. It turns out that he doesn't need that shoulder all that much. In Hogan's action, the left shoulder is pretty much a rotating hinge on the downswing. The pressure in the left arm is mainly from the triceps down into the hand. This is why the left arm appears to stay close to the body. It is the opposite of what you would expect, but the left arm remained firm enough to pull and simply carry out its primary role as guide. There was no tension in the left shoulder because it would serve no purpose other than to slow him down.

When I use the word "trip" I use it the way you would if you "tripped" a bear trap. SNAP! You see? There is a small trip in transition when the club head reverses direction and you can see recoil in the club shaft. Hogan put the wrist out of line at this point so that the effect of the transition "trip" is minimal. He wanted the big trip to happen just as it got into the hitting area, where he needs to be in an optimum leverage position and have maximum speed. The club only has to be square and moving fast in one place in the swing. Ben Hogan knew this and everything he did in the backswing was done to get into the best position possible in the hitting area.

Again, every word that Hogan said was true. When he said he rotated the golf club. HE ROTATED THE GOLF CLUB. If you just think about it you cannot go from cup to bow without rotating the shaft. The trick is to understand when and why he is rotating the shaft. With respect to the club shaft, he only wants leverage once and that is as he enters the hitting area. Hogan realized again that in reality the club head only need be square in this area. The Medicus training device, for instance, would be completely useless to Hogan. He would have "tripped" that device four times on the backswing alone!

When the wrist moves from cup to bow, it passes from a position of low leverage to a position of very high leverage and then back to low leverage. This happens when the shaft and left thumb are actually aligned with the left wrist (high leverage) and when the bow is fully formed (lower leverage) as the shaft trails the left wrist. It is the right hand that is pouring it on now. When Hogan is flowing through the ball, through impact, the club is pressured on the top and bottom only with the left hand thumb and forefinger and the right hand is now in a position to push squarely through. From here, he is pushing and pulling but it is mostly a massive right side push. The left hand is the guide while the right supplies the ride at this point. The turn of the handle is what rapidly accelerates the club head and shifts it into a position to be pushed squarely



and aggressively by the right arm and hand. The golf club's own bias for the toe to pull is what prevents it from over rotating. You can also always see that the shaft bends as Mr. Hogan makes this move. That is an indication of the introduction of a new source of leverage into the motion.

If you look at the sequence on page 98-99 of Five Lessons, you will see exactly where this rotation happens. Hogan is showing us. Anyone who introduces the idea that Ben Hogan is moving from cup to bow early in the downswing is quite simply wrong. That move would introduce the leverage way too early and create a cast that would have to be held back. Ben Hogan held nothing back.

Hogan gets a running start on the downswing with the turn of the hips and the "free ride". He takes that trip with nearly no leverage in the wrists. When he rotates the handle to move from cup to bow, this is the point when he is in the high leverage alignment and is when the club head squares and then rapidly chases through the hitting area. Tripping the shaft happens because the head has inertia and when the handle is rotated and the shaft aligns with the wrist the inertia redirects and starts what I call a cast at the bottom. The beautiful thing is that, because Hogan still has pressure right, he still retains his ability to move target ward without a stall, with the hands staying well ahead of the club head. The club head is moving through the ball with absolutely everything he's got.

You can duplicate Hogan's positions all you want, but without this there is no boom at the bottom. If you don't do it like this then it is just a lot of work. This is basically the only way for a 5'7", 140 lb. man to hit a 300-yard drive with a wooden club and a balata ball. Ben Hogan did not wave at the ball. He smashed the living crap out of it with the action that I have just described.

What I have just described above is essentially "The Secret" in its totality. It cannot happen unless you learn the Hogan Pivot. You learn "The Move" with the Pre-torque that I have described. That is why I insist that The Secret Is In The Dirt because you cannot make these moves until you get the pivot right, and that has to come from the ground.

So now, the stuff that Hogan put forward in Life Magazine as "The Secret" is "The Secret". He told us the truth, as usual, but, and this is a big but, it is only "The Secret" in the context of Ben Hogan's overall action. For the secret to be meaningful you must master Hogan's pivot. I have shown you the principles required for executing such a pivot and now it simply has to be practiced. Hogan's pivot moved the hips around and started the mass going back to the front foot while also retaining pressure in the right or rear foot. That is critical. This was the drop and plane shift and essentially what I have put forward as "The Move". What I have done is simply create a way to give the "live



tension” that Ben Hogan describes in Five Lessons a direction. The Pre-torque is quite simply just the most effective method I have been able to come up with to convey the correct feelings of moving into and around the right leg correctly on the backswing. Great players learn to build these same feelings dynamically. The Pre-torque is a short cut or fast track to these feelings and correct movements on the backswing through transition and I hope that this will continue to help people and will be recognized as my small contribution to the modern teaching of the golf swing.

If you learn to do them there are a number of grip and release combinations that will work very, very well for you and most importantly THE HOGAN RELEASE IS ONLY DOABLE FROM A PIVOT THAT RETAINS SUFFICIENT RIGHT SIDE PRESSURE. HOGAN WAS NOT TRYING TO CREATE A NATION OF HIPSPINNERS. HE WAS SIMPLY SETTING US UP TO PIVOT IN A MANNER THAT PRESERVED RIGHT SIDE PRESSURE RATHER THAN ENDING IT WITH AN EARLY LEAP LEFT.

Your back leverage point, the ball of the right foot, has to remain pressured as the hands approach the hitting area or Hogan’s release will simply not work. If you “trip the shaft” too early, or at the top, you cast. If you trip it from on top of the left leg you hook. The beautiful thing, however, is that “tripping the shaft” happens as a sequential thing rather than as a timed event. You simply feel it trying to happen and go with it. “LET” IS THE MOST POWERFUL WORD IN GOLF. The club head will want to try to square at the end of the “free ride”. A small turn of the handle ensures that it in fact does. When you feel it try, just TURN IT TO SQUARE. Incidentally, the feeling you will get is of rotating the toe, or simply turning it down because that is where the club now heads.

The cupping and bowing and the grip change in the Life Magazine article were critical and did a number of things. First, by putting the left thumb on top, Hogan put that hand in a high leverage position. By this, I mean that it is harder to hinge with a bowed or a flat wrist and the thumb aligned with the wrist. So, he has set up a high leverage relationship with the left hand and the club shaft parallel to the blade angle, which is great for reinforcing the strike and creating a powerful release. The problem is that this relationship between the thumb, wrist and club shaft is so taut and restrictive that just about any transition move will trigger a recoil in the shaft and a cast that you will not be able to catch no matter how quickly you move the rest of your body, especially given that Hogan wanted to retain firm and even grip pressure throughout the backswing.

Mr. Hogan must have thought, “Something must be done about this.” What Hogan did was exactly what he told us he did. He rotated the shaft slightly to the right on the backswing starting usually at about hip high on the backswing. He sometimes did it earlier, sometimes preset it, and sometimes executed it a little later, but the end result



was the cup in the wrist that he talked about. The only time it was not incorporated was when he was playing a draw. Now, what the cup did is it moved the shaft out of its straight-line relationship with the left wrist and into a position of minimum leverage. The cup in the wrist shifts the club off of the axis of the pronated left arm, which softens transition, in the sense, that you are in no position to leverage the shaft. This meant that in transition, the shift, turn and drop would not trigger the early release of the club head.

The Secret Pt. 2



**WATCH
NOW**



Now the magic is this. Hogan can swing with everything he's got from the top, knowing that the club head will lag no matter how firmly he holds the grip until the re-establishes the straight line relationship in the left wrist thumb and shaft. Again, you do this by doing exactly what he told Nick Seitz and George Peper he did. You simply turn the handle with the left hand and re-establish that straight-line relationship with the left wrist and the club shaft. When you make this move the left thumb and forefinger are pressuring up and down respectively in the same vertical axis as the blade. The effect of this is that the blade rotates easily to square, but has a hard time turning any further. In other words, Hogan tripped the shaft by simply turning the toe of the club to square the club as the free ride concluded. Del Starks, a protégé of both Jim Ballard and Sam Byrd, and someone that I thank here and now for encouragement, said that "Those in the know swing the toe." Evidently Hogan was "in the know".

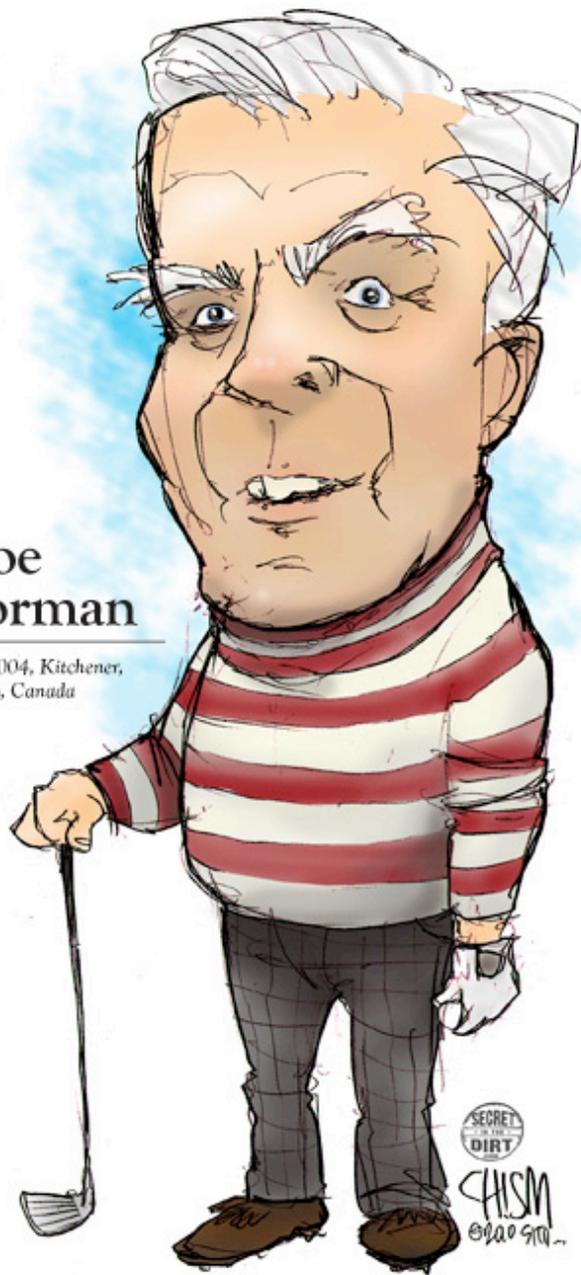
Now the reason that this works is that you are pressuring the shaft only up and down with the left hand and directly forward with the right, because the bonus of this little "trip" maneuver is that the right hand moves into a powerful position to push; and

this is where Hogan tells us he wishes he had 3 right hands. He meant that! Everyone has looked for this move in the impact area, or as the first move in the downswing, and has not seen it because it is not there. He spelled it out quite plainly in Five Lessons if you simply look at the drawings on page 98, where it is quite clear that the turn of the handle happens after what he described as the “Free Ride” of the hands and arms, with the plane shift initiated by the hip turn in transition. The effect of this realignment is what I have always called “Tripping the Shaft”. Tripping the shaft puts it back into alignment both to be pulled best by the left hand and to be pushed best with the right, while retaining the right side leverage point necessary to take advantage of the newfound leverage at the bottom. The club rockets through, and does so squarely. It is square to its arc before it even passes the back foot and remains so through impact.

For it to work, however, you must still have right side pressure and the hands must be coming into the hitting area. This means that Hogan’s move is useless unless you can execute the correct pivot. To execute Hogan’s pivot you must actively use the ground as I have described earlier. You must accept the dirt as your most critical point of leverage and commit yourself to using it.

The added bonus is that if you can execute this pivot correctly, a whole host of other releases are at your disposal. The key is retaining something to push against in the right side as the hands enter the hitting area. Peter Thomson, Lee Trevino, Moe Norman and Sam Snead of years past executed their actions in manners that retained this ability to still push late in the downswing. Today, you see similar retention of right side pressure in the swings of Boo Weekley and Sergio Garcia. It should not be a surprise to you that the methods that these golfers developed were worked out away from the world of mainstream instruction. Each resists the early leap left. They get left, but they get there a little later than the rest of the world has been taught to do, while retaining their ability to both push and pull with the arms. Golf is a two-sided game. Each side can only operate well against some form of resistance, in a direction opposing the direction of the motion that they are trying to make happen. That resistance can only be found in the ground. When you learn to use the ground properly you will finally come to know that every word that Ben Hogan ever said about his golf swing rings forever bold and forever true.





Moe Norman

1929-2004, Kitchener,
Ontario, Canada

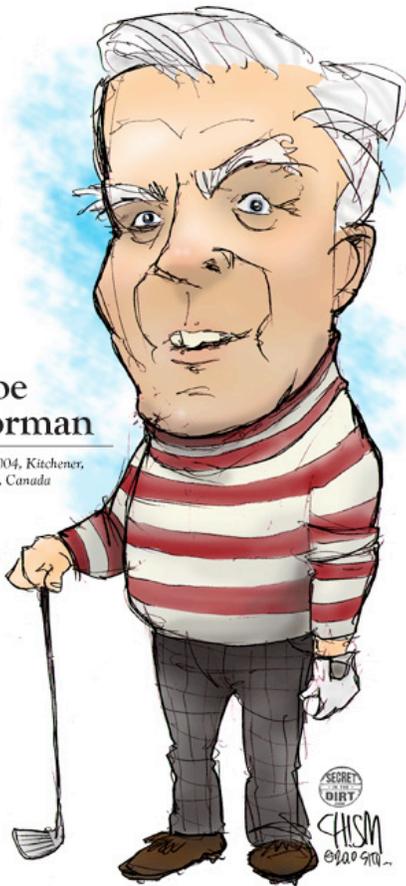
Moe Norman

Legendary ball striker. Second perhaps only to Ben Hogan. Known as "Pipeline Moe". Member of Canadian Golf Hall of Fame and Canadian Sports Hall of Fame. Won 55 Canadian Tour Events and 8 Canadian Senior PGA Championships, 7 of which were in succession.

MOE

Moe Norman

1929-2004, Kitchener, Ontario, Canada



Many years ago, I ran into Todd Graves, who was and is a Moe protégé, on the driving range at Thunderbird Golf Club, outside Toronto. It is called something else now, but Thunderbird was where Q School for the Canadian Tour was held every year. I was caddying for my friend, Jeff Froese, who was giving Q School a shot. Jeff had a swing like Weiskopf. He hit it great. I once watched him play six holes in 7-under par at St. Catharines Golf and Country Club. Another time, we were playing and I watched him hit a wooden 3-wood 340 yards, basically by accident. It just exploded off the club face. He didn't know why. I did. Let's just say for now that he rang the bell by accident.

Anyway, back to Todd Graves. Todd is on the range at Thunderbird, and I can see that he is swinging it like Moe. So I walked over to him and started talking to him about what he was doing and about Moe, who he obviously knew. After talking with him a bit, I realized that he knew Moe much better than I did. The range was empty and after we spoke for a while Todd was kind enough to let me hit his clubs. These were some of the very earliest Natural Golf clubs. He was surprised, I think, that I could make the Moe swing. I talked to him for a while and then I went on my way. The reason I bring this up now is that at the time I did not think that he had Moe's grip down quite right. I don't know how he holds it now, (Todd has probably got it bang on now because I know he spent a fair bit of time working directly with Moe) but at that time I didn't think he had it quite right. I sort of felt bad after I left the range for not mentioning what I thought. In hindsight though I just thought, well you're the pro on the range and I'm just a caddy with a couple of thoughts. Maybe I might be best to just keep my ideas to myself.

Moe's grip is an odd thing because it looks strong, but the left hand is actually pretty weak. It looks strong because the hands are high and he starts with the club a foot in back of the ball, so it's well

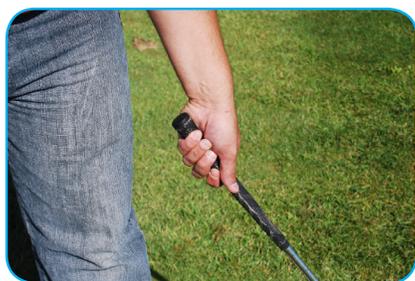
"Only two players have ever truly owned their swings: Moe Norman and Ben Hogan."

- Tiger Woods



into the backswing. Although the left hand is in a weak position, with the handle held high in the palm and the back of the left hand parallel to the face, the left thumb rides to the right of the shaft at about 1 o'clock. The right hand is strong, with the cup of the right hand bearing down on the left thumb also at 1 o'clock and the two middle fingers pulling back from 6:30 or 7 o'clock. The whole thing is worked through and against the left thumb. The blade stays square because the hands are not working together. They are fighting each other in a battle that neither hand wins, so the face does not rotate much. Moe could then shape shots with very small deviations in grip pressure between the two hands. Below is the grip he showed me. This was just prior to or near the very beginning of his association with Natural Golf.

The grip that Moe showed me:



Playing With Moe

"So in this best ball Pro-Am with handicap format with Moe, we didn't have a hope in hell of winning because we got absolutely no strokes....but hey we were playing with Moe Norman so this was going to be fun."

In the early nineties I was playing near scratch golf. Around this time, Curtis LaBelle had just become head pro at Niagara on the Lake Golf Club. Niagara on the Lake is a short but challenging nine-holer and is actually the oldest golf course in North America. Play it if you ever get the chance.

Anyway, Curtis was running his first Pro-Am tournament and Moe Norman agreed to play because he knew and liked Curtis. Moe would often show up to this sort of things to help out new head pros. Curtis was kind enough to pair my father and me with Niagara on the Lake club champion Mark Derbyshire and Moe. Mark has been a tremendous player for many years. He actually won 30 consecutive club championships at Niagara on the Lake from 1976 to 2005, which is, I believe, a Canadian record. So, needless to say, we had a pretty good group. Mark was the best wedge player I had ever seen, pro or amateur, anywhere. Pin high every time I ever saw him hit a shot from inside 100 yards. Unbelievable when I look back on it. He hooked his wedges too, but always, always, always frustratingly perfect. I beat him over nine holes many times on men's night, but I never beat him in the club championship and I was never able to beat him head-to-head at match play either. I played a club match against him once; I shot 31 on the front nine, and was still 2 down. He closed me out on 16. So in this best ball Pro-Am with handicap format with Moe, we didn't have a hope in hell of winning because we got absolutely no strokes....but hey we were playing with Moe Norman so this was going to be fun.

I had seen Moe do a few clinics before. One at the opening of Grant Taylor's driving range and another one that happened sort of impromptu on the first hole at the Niagara Parks Commission Whirlpool Course, where I had learned to play golf as a junior. I got to watch Lee Trevino a few years earlier, on that same tee, perform a 45-minute clinic. I was 20 feet from Trevino while he put on his

show and was totally amazed. Mr. Trevino had been paid a pile of money to promote a golf course that was being built in Niagara. Moe's clinics by comparison were another thing altogether. Entertaining and mesmerizing, but very low key with many spectators having no clue what they were watching. In contrast to Trevino's big budget show with entourage, escorts and hangers-on, Moe would pass a bucket around at the end of his demonstration.

I had read Lorne Rubenstein's book *Links*, which had a chapter on Moe and I had also come to know a bit about US PGA pro and teacher Paul Bertholy who Moe spent time with every year en route to Florida. So before our round I thought that it would be likely that I would be able to strike up some sort of dialogue with him. Getting him to talk at first, however, was pretty difficult. In the end, however, the day in general was vintage Moe. Equal parts fun and foul ups on the social side. I found out that the legend of Moe's chronic social missteps and foibles was no myth.

This was just before the Natural Golf stuff and before Titleist started paying him \$5,000 a month just to keep breathing. The Moe Norman I played with that day was the mustard-stained turtleneck version of Moe playing with a mixed bag of forged irons with dimes worn into the face. It was strange but awesome. We had a wait on pretty much every hole, because it was that kind of a tournament. On the third hole, which is a par five, we were really backed up and he was bouncing his ball up and down off the face of a wedge, waiting for a sucker to bet him on how many times he could do it. I'd seen this routine before, so there were no takers. I was asking him about his driver, which he let me hold and swing while we waited. It was the heaviest club I'd ever held and it had a really strange gold colored head and an even stranger wrapped rubber grip on it. Now it's time to play again so I hand the club back to him and he gets ready to hit. There's a little crowd around and a bunch of talking and he's goofing around, relaxing and opening up a bit and then this lady asks him why he stands so far from the ball with his feet so wide apart. He looks at her and he says "Because I'm a lardass." Then after a pause "...just like you." Then he goes over and pokes her in the rear end with the handle of his driver and says it again and starts giggling. "Yep, you're a lardass just like me." I nearly crapped my pants. He had no sense or concern at all that this would have been embarrassing as hell for her. I guess, he just thought "Well if I'm saying she's fat just like I am, why should she be offended." Then he gets back on the tee and he rips his drive. Then he hits his second way over the back. He was playing this 480-yard par 5 at 590 yards, which was the length of the hole the last time he'd played the course 30 or so years earlier.



I started to ask Moe a bunch of things about the golf swing and Paul Bertholy because I thought that might start him talking. I asked him what he thought about when he was hitting and what was important and then he just started talking. If you could think of a question, he'd think of an answer. That's the way the day went. *"What's the most important thing in the golf swing, Moe?"*

"The Pivot!"

"The Pivot?"

"Why sure." Then he grabbed the club and started to show how he moved his legs, getting really low and moving his hips and really exaggerating bending his left knee. Even as he showed it, it actually wasn't that easy to figure out exactly what he was getting at. Then he said, "That's why me and Hogan are so good."

"What do you mean?"

"We've got the same pivot. The same move. We both swing into the golf course, into our legs." Not over our legs and into the golf course, not over the golf course." Then he goes into Bertholy-speak about the rod and the claw and the vertical drop and the horizontal tug and other things that I knew very little about at the time. On and on he went. Then he was talking about Nick Faldo and how if he learned reaction instead of just action that he'd be twice as good. Next he was talking about psychology and working hard at liking himself and things like that. It was a wild conversation that flew in some unexpected directions and was hard to follow at times because he would also repeat certain phrases as if saying them more than once was reassuring to him in some way or would affirm them or something, like little mantras.

On the sixth and seventh holes I hit a couple of very good drives. I could hit it pretty far at that time. Moe says, "Oooo Hooo, can't be taught, can't be learned, can't be taught, can't be learned. And you've got it, kid!" His voice was way up high like a chirping bird with the word "learned", held and extended in the way that only those who heard Moe speak will remember.

"What are you talking about Moe?"

"Hitting it far. The only thing in golf that can't be taught and can't be learned. Can't be taught, can't be learned."

On the eighth hole, I asked him again about the driver because I had never seen a grip like that and I'd been curious about it since the third hole. He pulls the grip right off of the club. The grips on all of the clubs were all the same. They were long strips



of rubber wrapped over an under listing, the same way a leather grip would be put on. He said that they were made of natural rubber and he'd had them for more than 30 years. He said he took them off at night and just soaked them in soap and water and they would come perfectly clean, like putting on new grips every morning. I had never seen anything like it. He said they were popular in the 50s. After he took it off to show me, he just wound it back on. It took less than a minute to get it back on and fastened at the bottom and that was that. To make the grip thinner you just stretched the rubber tighter and wound it further down the shaft.

As mentioned earlier, Niagara on the Lake is a nine-hole course, so you play it twice from two different sets of tees. At the turn there was a logjam and there were hotdogs and burgers and sandwiches and a photographer to take pictures of the foursomes. Moe didn't want his picture taken and headed straight over for a hamburger and a coke and to put a little more mustard on the front of his turtleneck.

A number of things stand out from that day in contrast to what people think. First, was that Moe hit it pretty far. Everyone says he couldn't hit it very far, just straight. But he was over 60 and he hit it far - several drives of 280 yards or more. That's long for a 60+ year old. I can't imagine how he hit it when he was 30. Second, those rubber grips that he had on his clubs were oversized a bit, but not oversized by much compared to the Natural Golf ones he used later. Third, his stance was wide, but not as wide as when he did his clinics and it was not wide on all shots. Finally, he was using an overlap grip (Vardon grip), not the baseball grip he used when he started on with the Natural Golf business. The only thing Natural Golf in his bag that day was a putter. I think he might have changed his swing a bit to please the Natural Golf folks and Jack Kuykendall.

There were other things that happened that day. For instance, Moe hit it great but scored poorly. I don't think he actually lined up a putt all day, but I had a great time and two very important things happened.

First, I met Moe and got to talk to him enough that day that when I would run into him elsewhere he would give me a moment or two of his time. Interestingly, if I showed up to a clinic or bumped into him at a golf course and my wife was with me he would be like a clam.

If I showed up alone he'd talk a bit and answer pretty much anything I'd ask. Secondly, what he said about himself and Hogan made me want to research the similarities in their swings more closely and that is what I proceeded to do.

I had a conversation not long ago with Todd Graves who I have mentioned earlier in the book. Todd is currently acting on behalf of the Moe Norman estate to keep tabs on the use of Moe Norman's name and trademark.



We had a most pleasant conversation about Moe and about the day that Todd and I met on the range at Thunderbird all those years ago. I want to mention this conversation because Todd agreed with me that the world has somewhat of an inaccurate view of Moe both in terms of his personality and his golf. There are three things that I want to touch on. First is his shyness and suggestions that he was unintelligent and or autistic.

To start off people need to understand that Moe was smart. He may have had some difficulty mixing with people and expressing himself, but inside of him were complicated and mature thoughts and given a chance and in the right company they could and did come out. The notion of autism may be correct but not being a doctor I am really not qualified to say. I would, however, like to put forward my impression of things as I saw them and you can make what you will of them.

Whenever I spoke with Moe the impression that I was struck with was that he sounded like he was somehow stuck trying to express adult ideas and understanding from the emotional perspective of a kid. Right or wrong, that is how he sounded to me.

Moe was about 4, I think, when he was hit by that car while tobogganing and it seems like a lot of his actions and mannerism were sort of child like as if a part of him was just stuck or suspended at that time. So, perhaps there is a relationship between the accident and the way that he related to the world. His sense of humor was like that of a kid also. I got the sense that on some level he was just shy and uncertain about things the way that young boys can be. It seemed that he was just this way in spite of all of the other complex adult capabilities and ideas that were swimming around in his head. His shyness and fears as he faced the world had a childlike quality of honesty about them and there was a natural playfulness to Moe. Those same qualities are what made him so damned interesting to relate to. If you talked to Moe and he actually engaged in a conversation with you it made you feel good and privileged in a strange way and could move you on a very personal and emotional level. The way he spoke of and embraced his golf shots emotionally as if they were like comforting little security blankets could actually move you. Some experiences can change your mind. The way Moe Norman connected with his golf shots could change your heart.

I did not speak to him with the frequency that Todd Graves and others did but just getting a response from him made you feel that on some level he must feel comfortable and thought you were OK. You felt like you must have broken through a barrier.



Some More Thoughts On Moe

"Hopefully someone will come forward soon with some great old footage of a youthful Moe. If it surfaces it will surely be a treasure for anyone interested in golf. I've got my fingers crossed."

I know that Todd and others that I have spoken to who got a chance to talk with Moe had similar feelings about relating to him. My prevailing thought is that as I suggest above perhaps his childhood accident took some of his social tools and sort of suspended them in time. The rest of the mind chugged along but maybe that part somehow never caught up. I can only imagine the frustration for him. If that is how one would define autism, then I guess that I would agree that that is what was up with Moe, but as I said I can't really say. I can only try to describe the impression that I was struck with as I related to him.

The second thing that I want to point out is that the "Natural Golf" version of Moe was not the best version of Moe. I have nothing against Natural Golf, but I am simply saying that in my opinion that is not Moe Norman at his best. It is nowhere even close. The world has come to know these images most because most of the best quality video of Moe is from that era. Precious little high quality video is available of Moe doing it purely "his way" and so unfortunately the world has been fairly much deprived of seeing the very best version of the Moe Norman golf swing. Hopefully someone will come forward soon with some great old footage of a youthful Moe. If it surfaces it will surely be a treasure for anyone interested in golf. I've got my fingers crossed.

The final thing that I want to point out and that I touched on earlier is that Moe was not a short hitter. He has been labeled that way and it is simply wrong. He didn't bomb it like Nicklaus, but hell nobody smashed it like that. There is a perception that he could only hit it straight and that comes from the clinics that he gave where his monotonous accuracy was what people came to see. They came to see it and so Moe delivered it. He aimed to please! As I mentioned earlier when Moe and I played together he hit several drives in the 280 range and he was by just about any



standard in golf an old man at that time. I discussed this with Todd Graves during our conversation and he agreed. He told me that when Moe was put on a swing speed analyser in the late 90's he clocked at 106 mph with the driver. That would put him in regular Tour pro range when he would have been a super senior in his mid-late 60's.

Todd also told me about playing Augusta National with Moe around that time and watching him carry a 4 wood 225yds with relative ease. So if we extrapolate a little I think it is obvious that as we rolled back the years we would find that Moe hit the ball a very long way. You don't put up the numbers that he did in competition unless you can bust it when you need to.

To find out more about Moe you can find Todd Graves at the Moe Norman Golf Website. The "Who Was Moe Norman" section is really great and you will see in that black and white picture that Moe is holding it with a Vardon style overlap the way he did when we played together.

I was interviewed about Moe on ESPN Golf Talk Radio with Mike and Billy this past summer. You can download and listen to that podcast here:

Click on the link below to listen

Podcast on
ESPN Golf
Talk Radio



This is the web page that that link comes from:
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Golf Talk
Radio: Mike
and Billy



Moe Norman and the Move

Moe Norman and his swing, at first glance, appear to exist outside the world of accepted thought about golf and just about everything else for that matter.

Here's a question for you:

Where was Moe Norman in 1956 when his invitation to play in the Masters tournament arrived?

Answer: He was setting pins at a bowling alley.

Why the hell no one has ever made the connection before, I have no idea. I'll bet you dollars to donuts that Moe was a hell of a bowler. If you can throw a bowling ball you have experienced the proper technique for hitting a golf ball. A right handed bowler throws a bowling ball off of the right leg. You flow into the left leg, which braces you for balance as the swinging mass of the ball passes your rear balance point. From here you are in free flow into the brace of the left leg. This is a linear version of what happens along the rotational arc of the golf swing. This is how Sam Snead and Ben Hogan and Byron Nelson and Moe Norman and countless others moved through the motions of the downswing in golf. You flow into the forward leg. You flow through the ball and into the golf course. I assure you that you cannot move the club head faster than you can swing it. Ernest Jones was quite prescient with that one.

In reality, you only need to be concerned with two things swinging in golf; the hips and the hands. Each ascribes an arc. The golf club is easily squared if it is smoothly accelerated and simply turned or rotated down into a square relation to the plane or arc it is being motivated on. This is not done in the hitting area. It is executed well before the club head enters "the hitting zone". What we feel as the beginning of the release occurs as the rear leverage point is lost. In other words, you feel the bulk of the shift at the bottom. Everything should feel like it moves through the ball together. In reality, the sequence of motion described in Ben Hogan's Five

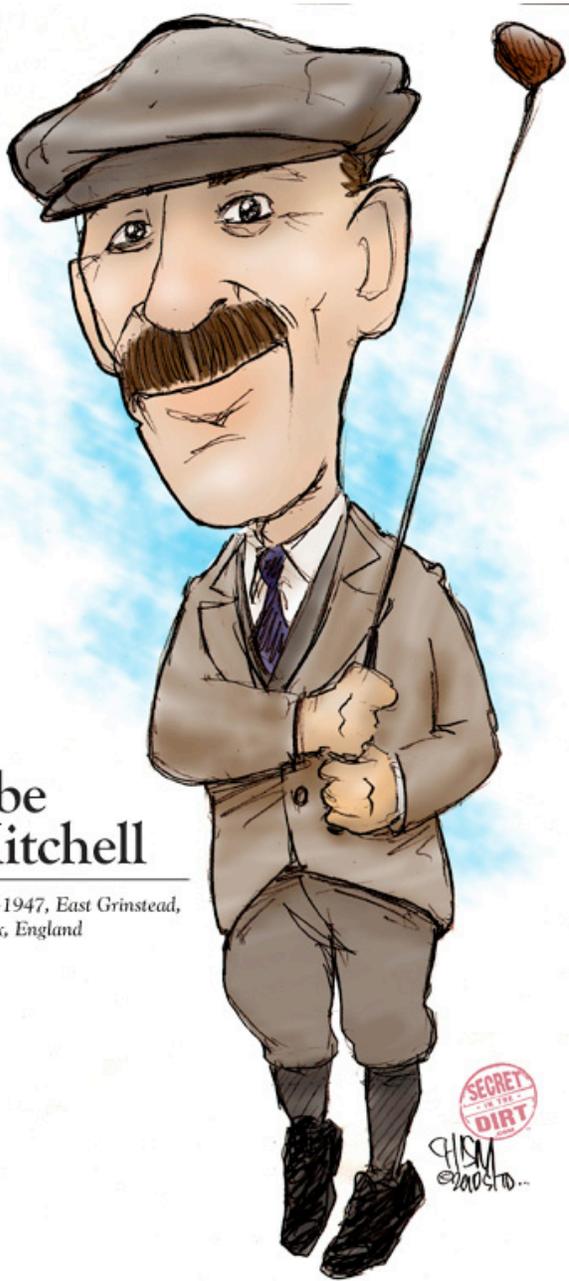
Lessons is what precisely what happens - hips, shoulders, arms, hands, and club head. It feels, however, like you are simply accelerating the club head through the ball with your entire body as you move into the left leg. Momentum carries you to your finish.

Why is this sequence the best way to move through the ball? Because nothing trips the release of the hands until the ball is long gone. The hands need only turn to square the club head. You have complete control of the blade because you are never doing anything other than pulling and guiding it with the left arm and pushing it squarely with the right. By the time you are fully into the lead leg the ball is gone. You need never fight the club head. You need not time the release. You simply turn the hands and accelerate through. Turning the hands to square is all the release you will need and more.

If you leave that rear leverage point early you will cast the club head. It is as simple as that. The only way to prevent casting is a hold-style, pure body release requiring strength and agility. Such a release is, in a nutshell, more work than should be necessary. We are striving for "Effortless power, not powerful effort", a phrase I first saw and was fascinated by, in an article written by PGA Master Professional Danny Harvanek in 1999.

The best way to preserve that rear pivot point in transition, and still motivate the hips to open as they must to allow you clear passage to the ball, is to drop/sit/compress into the support of the right leg; which basically is your rear pivot axis point. Standing up or leaping left, will waste everything that you have worked to build on the backswing and you will have to find another way to accelerate the club head. You have now shifted from effortless power mode to powerful effort mode. Welcome to the world of inconsistency.





**Abe
Mitchell**

1887-1947, East Grinstead,
Sussex, England

Abe Mitchell

*You'll recognize him as the little man on top of the Ryder Cup trophy. One of the longest hitters of the hickory era. Left us with great golf literature like *Length on the Links* and *Down to Scratch* and advanced concepts of muscular torque and winding. Perhaps the greatest golfer to never win the British Open.*

SNEAKY LONG

RINGING THE BELL

"Then, a check to the right and in the jar and another eagle 3. He is now 7 under par after 6 holes."

The finest 9 holes of golf I have ever witnessed and the strongest golf shot that I have ever witnessed were both performed, not by a pro, but by an amateur who I mentioned earlier. His name is Jeff Froese and, like me, I don't think he has played much golf in a good many years. I will start with the 9 holes.

We were playing at St. Catharines Golf & Country Club, where we both played regular money games together. Stanley Thompson, in collaboration with Robert Trent Jones, designed the course, which opened in 1947. We were playing from the back tees, so we are talking about a full 6,792 yard track. Jeff was attending Florida Southern at the time and was home as usual for the summer. Jeff had recently set the nine-hole record of 29 at the course in Lakeland that the school used for practice. Jeff, despite being capable of shooting 29, was ironically not a part of the Florida Southern golf team's starting line up. Anyway, that record is pretty impressive given that Florida Southern alumni include Lee Janzen, Rocco Mediate, Marco Dawson and others who made it to the big league.

Now then, let's get back to the round of golf. I knew that I would likely be shelling out some cash by about the third hole. Jeff went eagle, birdie, birdie. He then parred the fourth and birdied the par three fifth. Jeff was 5-under through five. The longest putt he faced in this stretch was from about 12 feet. It was a very serious ball striking display. The sixth is a long dogleg par 5, reachable only with a perfect drive and another bomb. Jeff's drive was great but he wasn't getting home. The choice was to either run it up near the green and try to finesse a flip shot close, or lay up far enough to throw in a dart from a favorite distance. Jeff chose the sensible play and tried to lay up back about 80 yards from the pin, which was a wheel house distance for him. Jacked up a bit I guess, that lay up went about 30 yards; long leaving him 50 yards from a front pin and facing a finesse shot from chilly dip territory; not what he

was trying to do.

Jeff was angry at himself because he now faced a tricky shot. He decided to go in low and bump one onto the front, which was the safe play. Out comes the pitching wedge and zip, zip it is on its way. Upon landing, the first bounce is to the fringe in front. Bounce two is just short and left of the pin. Then, a check to the right and in the jar and another eagle 3. He is now 7 under par after 6 holes.

Jeff made par on 7 and we are off to the par-5 eighth. The eighth hole was about 520 yards long and played steeply downhill once inside 180 from the front of the green. The perfect drive puts you at the top of the crest of that downhill slope. It is a nice driving hole because your best shot might get you just to the top of that hill, leaving the player with a view of the hole and middle iron to the green; but you really have to bomb it to get it to position A. Jeff, taking his usual swing, smacked it right down the middle. It looked perfect, but it didn't seem to want to land. It took its first hop past the two hundred yard marker and skipped over the top of the hill, trickling down the steep slope into deep rough near the 150-yard marker. The hill is kept with rough so only a shot that flies the crest will normally make it to the bottom. Jeff now faced a hanging lie and a steep hill. He had been punished for hitting it too good. The safe shot was to flip it to the bottom of the slope, but he was already 7-under and only 160 yards away from another eagle putt. From this difficult lie he took 9-iron and hit a laser directly at the pin. Bounce one was about a foot in front of the flag, which it narrowly missed. The second hop, however, skidded on the back fringe. The ball had no juice and rolled into the back bunker - Jail. The eighth green slopes significantly back to front and Jeff's lie was horrible. The shot went from close to perfection to through the green. Jeff had broken the cardinal rule - to never miss a back pin long, but what an effort. He scraped the ball out of the bunker and then 3-jacked from the front of the green. With the wind now out of his sails, Jeff bogied the ninth hole for a 31; but how close it was to being a 27 only those who witnessed it as I did could tell you. Jeff's back nine was average and he finished the round with a 68 or 69, but that front nine was the best golf I have ever seen played anywhere.

Upon reflection, I tried to figure out what had happened on these bombs that Jeff seemed to hit by accident and I just chalked it all up to adrenaline. It must have just been that he was jacked up, given that he was taking it so deep under par that day. Jeff was a tall guy and strong, but he was more of a control player than a long bomber. A few weeks later, I watched him sail a balata ball with a wooden 3-wood nearly 360 yards with relative ease. When he did it, however, I noticed something. It didn't look like he had swung the club. It looked like Jeff had swung his belly button. The right hip



slid right, which he did not usually do, and the left hip swung deep and wide back to the target moving very rapidly. It looked like everything that the arms did, they did as a reaction. So I thought to myself, it looks like there are two swings going on here. Maybe it is the swing of the hips that motivates the swing of the arms. My vision of it to this day is of the “donger”, or clapper, inside of a fixed and stationary dinner bell, with the donger being swung by a string from one side to the other. The string I imagined as the legs. The donger was the belly button and that was attached to the top inside of the stationary bell. Now if you just think of the top inside of that dinner bell as the top of the spine between the shoulder blades, we get to the C7 vertebrae and we just might have something interesting going on. In the golf swing you have to ring the bell twice; which leads us to Mike Austin, the longest hitter of them all and a guy that Ben Hogan sought out on several occasions to play practice rounds at Riviera Country Club in Los Angeles, California. I won't be going deep into Austinology, but it is important because Mr. Austin teaches a release that is essentially a two-hand throw from the top.



The longest hitters are often a little wild because to generate that club head speed requires that you swing with a certain disregard for where the ball is going to end up."

I am always asked about how to get more distance. My quick answer is to develop a swing that uses proper sequential motion and then get stronger and faster. The complete answer is a little more involved, but not much.

To hit it far requires a combination of strength, speed and agility wrapped in a swing that is anchored by proper sequential motion and motivated from the ground up. These are the ideas I focused on when I started to think seriously about shaping the most efficient swing motion I could for myself.

Swinging a broom or a heavy club daily is a very good way to develop all of these things. Smacking a baseball bat against a car tire doesn't hurt either.

An interesting observation is that the faster and further the belly button moves (which is where your center of mass lies) on the downswing the more club head speed is generated and the further the ball will go, assuming square contact from a solid base. This is a sort of radical simplification of things that is basically in line with the ideas of legendary long baller Mike Austin.

The longest hitters are often a little wild because to generate that club head speed requires that you swing with a certain disregard for where the ball is going to end up. The longest hitters often don't care at all about where the ball actually goes. They set out to hit it far and that is what they achieve. They have a certainty of purpose. In their minds the purpose of standing up to hit a golf ball is to hit it hard and far. Caring where it goes interferes with this goal; so long hitters either have just never cared where it goes or have learned at some point to stop caring where it goes when the swinging starts. Since we have to move the ball in a pretty particular direction on the golf course to play reasonable golf, a physical and mental strategy is required to achieve consistent distance in the desired direction.

The solution to the distance-direction dilemma is a balance of faith, trust and what I call “Don’t Give A Shitness”. You choose the balance of these three that gets the best results for you. All three together in equal doses would probably be the ideal, but you must find the balance that works best for you.

To generate maximum club head speed you have to swing, in a way, as if you don’t really care where it goes. Confidence and faith that you have aligned correctly is what will allow you to do this mentally. In other words to hit it far you have to line up and “Take Dead Aim” as Harvey Penick would have said and then you have to have the faith, trust and confidence to know that this is about all you can do to ensure the desired result. Now you have to decide to just let go, know that if you have set up properly and make your swing the results will range from palatable to excellent. You then just have to trust and swing.

So basically the recipe for distance on the course is to have faith in your alignment, trust your swing and then just make that swing as if you just don’t care. The combination of Faith, Trust and “Don’t Give A Shitness” is what gets the job done.

George Knudson said that it was what we attempt to do that is more important than what we do and I subscribe to this philosophy. He used to also say “Give up control to gain control.” and this is particularly true in driving.

From a psychological point of view the most important thing for hitting it long on the golf course is meticulous care of your alignment at address. You must know and trust that you are pointed correctly. When I say pointed correctly I mean pointed correctly for you and the shot that you are about to hit. Only then can you swing the club through its purest arc with the necessary feeling of abandon and without the urge to steer. It is the effort to direct the swing and steer the shot that steals much of the speed and actually the accuracy as well. Again... “Give up control to gain control.” This is absolutely true in driving. This is a matter of trust and acceptance. Trust your alignment and then trust your swing. Boom!

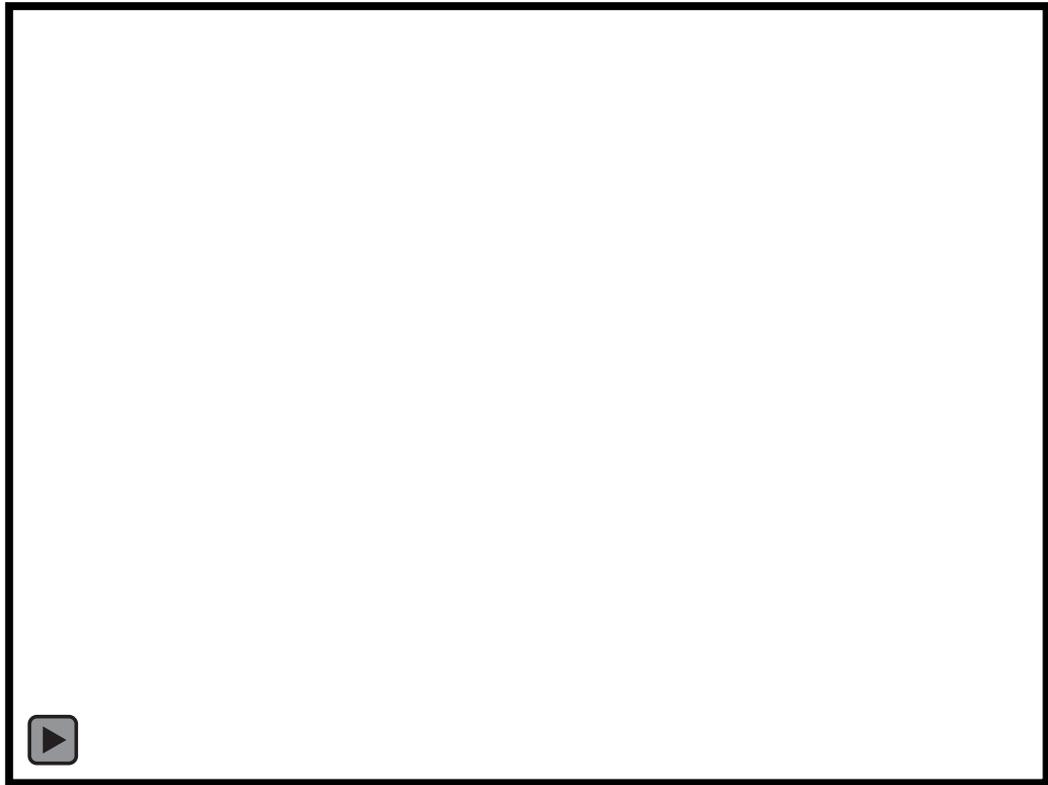


The Best Way To Align You In My Opinion Is Dynamically:

Dynamic
Alignment



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SNEAKY LONG

FINDING THE MOST POWERFUL POSITION

"You may soon find your playing partners asking you "Where did that come from?" Just tell them that you have studied the art of "Sneaky Long"

A lot of people have asked me to give them some advice on how far to take the club back or similarly they may ask "How do I know when my back swing is done?"

Have you ever wondered why when you watch a tour pro they rarely look like they are making a really big swing and yet the ball just rockets off? One of the reasons that the swing doesn't look that big is because it is executed with such control and balance, but in reality most Tour Pros (John Daly and a few others excepted) and top amateurs don't actually make that big of a swing. The reason is basically economics. There is a point on the back swing beyond which there is nothing left to gain.

Have you noticed that sometimes when you try a $\frac{3}{4}$ swing say to lay-up short of a water hazard you often hit the ball substantially further than you would expect and often further than your normal full swing? I wondered about this years ago when I was trying to create the most economical and efficient golf move I could. After looking at this I came to realize that when you take the club back there is a point that you just can't go past without losing some or often most what you're trying to build up on the back swing.

The point not to pass I call The Most Powerful Position. In a nutshell through trial and error I came to the conclusion that the back swing is complete when the right shoulder has moved to or nearly to an inline position with the chin and the ball and the hands and arms have risen naturally so that the hands have been moved as far away from the ball as possible and no further. At this point they are also about as far from the target as they can be moved while in balance. Now, since you are swinging on an arc there is a point beyond which you are actually going to be moving your hands closer to the ball if you keep going on the back swing and closer to the target as well. You will have to flow back through this Most Powerful Position in order to get everything out of the shot.



This means that the swing has too many directions or at least you have introduced an unnecessary added direction.

The direction that concerns me the most in the golf swing is the direction of the target. On the back swing I am thinking of winding everything up simply so that I can send it back through the ball in the direction of the target

To illustrate imagine a string attached to a tee under the ball. As you swing back and find the point where you are in balance with the right shoulder turned to the chin you will find that the hands have moved as far away from the balls a geometry will allow. Now imagine the straight-line distance from the hands to the ball with a string stretched tight. Turn further and you will have slack move into the string. You will then have to move the hands back to the right before you can send the whole package down and through the ball. Some players can do it, but my contention is that they are wasting energy and wasting motion and that they could get more consistent results with a more abbreviated action.

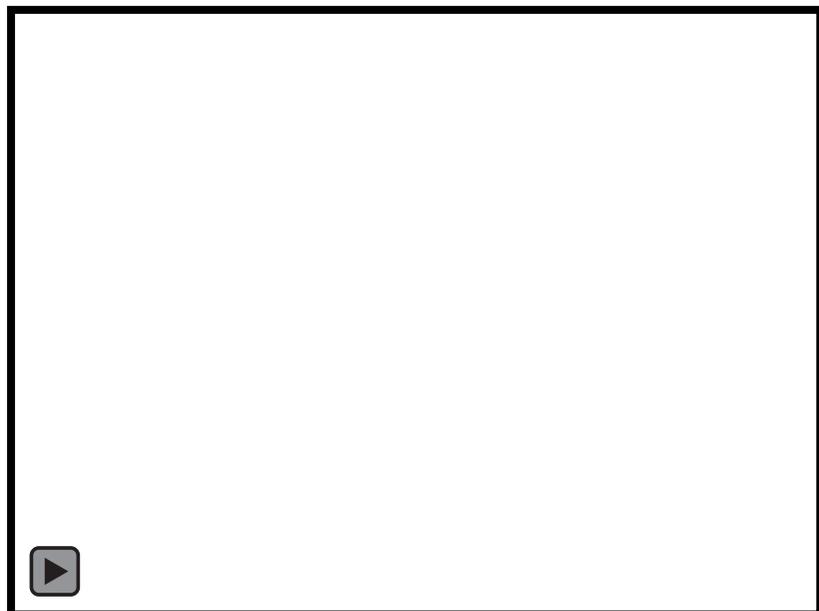
I discussed this at length with Steve Elkington this past summer. Since that time he and I had a chance to get together and film a little bit about it on the range at Champions in Houston. Hopefully our little chat will illustrate a little better what I am trying to talk about here. In the upcoming versions of this book I will also see if I can have a couple of illustrative drawings created to make this point still more clear.

In conclusion, on the back swing we want to move efficiently into our most powerful position and no further and then we want to just send it all back through the ball from there. Work on this for a bit and you may find that what you think of as your $\frac{3}{4}$ swing might actually be the whole enchilada. You may soon find your playing partners asking you "Where did that come from?" Just tell them that you have studied the art of "Sneaky Long"

Sneaky Long



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Finger Pressures

The legs and lower body in general stabilize, support and motivate the bulk of the moves that the golfer makes.

As we near the close I would like to revisit what was started earlier regarding the grip formation. In particular I would like to focus again on hand strength and pressure points and the fulcrum points that we form on the shaft. This will not be a typical chapter because it will be about some fine details and some observations about the hands and how they work together. For some this might seem a heady discussion but I hope that I can make it plain enough that you will feel confident enough to toy around with some of this to see what it may mean to your action.

The first premise of this chapter and in fact one of the more important early points of this book is that the hands must be strong to play good golf. That said, they must be strong not because you need and will be calling upon all of that strength during the golf swing, but rather the opposite. You want your hands, wrists and forearms to be exceptionally strong so that you are always using only a fraction of your available strength during the golf swing. This is the only scenario that I know of where the balance between relaxation and control can be met.

So far in this book I have not gotten into the specifics of the grip other than the basics and reiterating what has already come to be accepted about the positioning and balance of the hands by a great many other instructors. The reason for this is that the prescription for each golfer is always a little bit different because hand size relative to grip size is a major factor and so is the ratio of palm to finger length and also relative hand strength. So as you can see when it comes to the hands we have a great number of variables. Just to give an example from my own experience, a relatively thick grip I will hold in the palms like Moe Norman did. An average men's grip I will hold a little more like Ben Hogan did and a junior or ladies grip I would hold like Harry Vardon or Tommy Armour. 3 different holds on the club dictated by my hands size and



the characteristics of the grip on the implement I am trying to make work. Within the framework of each of these grips my finger pressures will also be different depending on the type of shot and trajectory I am attempting to create.

Last summer I began to talk about details of the golf swing a lot with Steve Elkington. The first thing we discussed was, as you can imagine, the pivot. The next things, however, that we discussed were the hands and arms and during our conversations we got into a lot of specifics about the role of the hands and how they worked together and influenced various ball flights.

If you have stopped by the Secret In The Dirt website you will see a lot of reference to Henry Cotton because he along with Harry Vardon and Ben Hogan and Bill Mehlhorn and a host of others became particularly important to our discussions about the grip. With respect to some of these things which I will be going into now, you will be viewing parts of the videos that I sent to Elk last summer to solidify what we were talking about. This one is about the role of the left thumb on the backswing.

Club in the Catcher's Mitt



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We also talked about the fact that we can consider there to be multiple fulcrum points on the shaft depending on the pressure points in the hands. Modern teaching usually puts attention on the butt end of the club as the fulcrum point. This approach is contrary to the way golf was taught before instruction became more standardized 50 years ago, but it is the easiest way to get someone to gain basic control of the club and manage a release. People learn to focus on what I call the last three finers or “jam



jar fingers” as I call them of the left hand for a right handed golfer. That is fine, but unfortunately most people never find out what the rest of the fingers can do.

The hands are what puts the blade square and the fingers that feel and sense the orientation of the blade the best are the most sensitive ones; the thumbs and forefingers. A grip formation that puts the thumbs and forefingers on that shaft to best sense the blade orientation is in my opinion best. That is why I prefer the Vardon grip.

Many people will say that physics and the forces of the swing (whether described as centripetal or what have you) is what squares the clubface and to that I say “Baloney”. It is your responsibility to square the club at the bottom. Physics may help, but if you accept it as your job to sense the orientation of the clubface throughout the swing and square it at the bottom I believe that you will be pleasantly surprised by what you can achieve. Whether you talk of active or passive hand action is of little consequence. What I believe in is “educated hands”. Whether the hand action is mostly a reaction to what the body is sending out to them to deal with or whether the hands are more consciously active depends on the golfer and on the shot at hand. People may argue in a derogatory sense that “active hands” are unnecessary or “a manipulation” and rail against my statement, but I counter that with the notion that many shots are impossible without such manipulation. Since that is assuredly the case, you better learn how to use the hands unless you intend to be a “One Shot Johnny”. “Vanilla” golf is great but sometimes you need to whip out some chocolate. Get yourself in trouble and you may need to conjure up a banana split and for that you will need hand control.

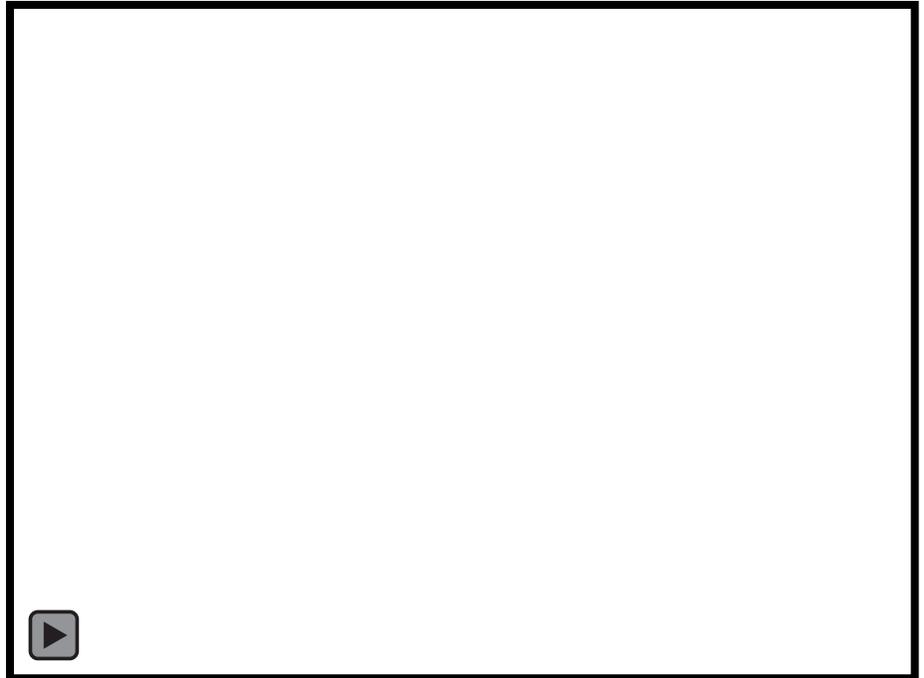
Let’s start with the leverage points. There are basically three to concern yourself with. The butt end of the club is the first. This you already know because everyone is taught to clamp down there first with the last three fingers of the left hand. For most people this becomes the fulcrum point on the shaft around which they swing but I would contend that their attention should be elsewhere and a little further down the shaft in this regard. The next, and what I call the true or balanced central fulcrum point, is between the left thumb, index and second finger and includes the two middle fingers on the right hand which are pulling up on the shaft and the palm of the right hand which pushes down from fairly high on top of the left thumb. Through the left arm this point runs on the inside of the wrist, or the hinge of the left arm. The last leverage point rests between the right thumb and index finger. In my opinion the heart of shot making lies in the balancing of these leverage points. The pressures you exert influence both the path you send the club head back on as well as the downswing club path, the wrist alignment and the rate of closure in the impact area and these elements effect the ball flight.



Fulcrum Point



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Just as your feet are your sole connection with the ground, your hands are your sole connection with the golf club. It is my contention that these are the things that you need to manage most in the golf swing.

Now that I have described the fulcrum points I would like to describe in very simple terms what happens as you vary the pressures on either side of the central balanced fulcrum point. The left thumb must always pressure and support against the top of the shaft. This pressure is what gives you a sense of the orientation of the blade. It also controls to a degree by feel where you are sending things on the backswing and provides the support you must give the club at the change of direction. Ben Hogan told Bill Mehlhorn that he wished he had 10 thumbs. He wanted them to support the shaft. Pressuring the left thumb also encourages the wrist to align which is the orientation we want through the ball. This is basically just a biokinetic thing. When you make a fist if you do not draw the thumb in close with a squeeze the wrist does not firm and align the way it needs to to deliver a punch. Punch something with a loose thumb and you're more likely to hurt yourself than anything else.

When we grip as per the normal prescription with pressure in the last three fingers of the left hand we are setting up the butt end of the club to be the point around which the club moves. This is good for beginners because these fingers are generally strong enough from use in regular life to support the club enough to make a half decent golf swing. As the golfer improves in terms of strength and technique, however, this hold on the club will eventually lead to loose shots and hooking so as the golfer progresses



he must learn to pressure also with the left thumb and forefinger. To some this feels odd at first, but it is the first step in gaining better control of the blade at the bottom. The golfer will now find that by managing pressures between the two hands he can hit draws and fades not by manipulating the hands but rather just by varying the pressures on the club head side of the central balanced fulcrum point and the tail side.

The reason that this works is because pressuring on the club head side of this point retards the rate of closure. So for instance if we pressure the tail at finger pressure 5 on a scale of 1 to 10 and then pressure central fulcrum point at 3 and the right hand at grip pressure 2 with a proper grip and a decent swing we may have a tendency to draw. Ratchet the pressure down the shaft in the right hand up and back off on the tail of the club and we slow the rate of closure and tend to fade.

I bring these observations up to encourage you to put your mind into your hands and experiment with these pressures. Figure out what balance of pressures between the hands in your grip and swing tends to create your desired shot pattern and you now have a new and valuable set of tools in your box. Note also how increase grip pressure in both hands also will tend to bring your trajectory down. Once you get good you might actually be able to hit shots with 10 pressure in both hands. Dr. Evil would call the shot that you hit with that pressure "The Lazer".

Now go to the range and have some fun.





THE MOVE

"He said he was practicing his balance and tempo and that this barefoot practice would also help him to swing within himself. He said that without golf shoes you are forced to swing at about 70%."

The first time I saw Lee Trevino up close blew my mind. He was promoting a new golf course development and performing a clinic on the first tee of the first hole of the Niagara Parks Whirlpool Golf Course. This was the same tee box I watched Moe give a clinic on a few short years later.

Trevino had all of the shots and hit the ball on such a strong, boring trajectory that it was hard to believe. Apart from the shots though, what amazed me was the turf he was churning up with his right foot as he hit. There had to be a great deal of pressure there, I thought, because my practice sessions never left marks like that.

That got me thinking about what his feet were doing. So impressed was I with Lee Trevino's brief demonstration that for a couple of summers I practiced trying to make swings just like Lee Trevino. I could make it look like Trevino, but while the body was making the moves, the ball never left with the amazing zip that Trevino's shots had.

In 1991, I made a trip to Port Charlotte, Florida for a week of golf and fun. While there I had a chance to play some golf with Rick Stallings. Rick wanted to tee off later and preferably last so that he could practice. Rick had probably the finest golf swing I had ever seen.

We went out for nine holes when no one else was on the course and Rick played in bare feet the same way that Sam Snead had said he had practiced. Rick lifted his toes, stood firm on the balls of his feet, and hit some of the most beautiful shots I'd ever seen. He said he was practicing his balance and tempo and that this barefoot practice would also help him to swing within himself. He said that without golf shoes you are forced to swing at about 70%.

It dawned on me then, as I watched his right heel come up perfectly towards the target as he moved through the ball that,



like Trevino, the ground was the critical element in the golf swing. It all seemed to come from there.

In subsequent years, I studied Knudson and Hogan and the Five Lessons swing. In the process, I ran into the same issue I ran into with aping Lee Trevino. The swing looked like Hogan and Knudson, but lacked the zip. I was using my legs like a platform and hitting good shots, but not of the caliber and consistency I had seen Trevino and Stallings hit with.

I was doing everything to the letter in my mind, and worked very hard to follow and feel the “live tension” that Hogan described. My right foot, however, never seemed to come away from the ground the way I had seen it happen in film of Hogan and Bobby Jones and so many others. It certainly was not working the way Rick Stallings’ feet seemed to be working, with the rear heel moving target ward as it rose, instead of just flipping up.

I was moving squarely in the right leg, which was all the rage in the instruction magazines, but I just didn’t feel the traction and stability that these other players had. I experimented with new golf shoes when I heard that Ben Hogan was so particular with his, and that he had his shoes custom made with an extra spike under the ball of the trail foot. But I had no inkling as to the significance of the position of that spike. I just thought that it was a place that most shoes had room to put another spike and he wanted as much general traction as he could get.

I was playing good golf by this time but I knew I could get better. I just didn’t know how. It seems also that whatever these guys were doing with their legs and feet, it was different than what I was doing and what most of the other golfers around me were doing. They were, without question, a notch above. I scratched my head a long time trying to figure out why. Then I found out basically by accident. Necessity is the mother of invention. It was the necessity to not hit a hook that led me to feel “The Move” for the first time.

FINDING "THE MOVE"

MONROE COUNTRY CLUB 1996

"So I pointed myself out of bounds left, looped it up as I turned down hard into my right leg and swung way out to the right."

I discovered the significance of "The Move" by accident at Monroe Country Club in Rochester NY in 1996. I was playing at sectional qualifying in my first attempt to compete in the US Open. I was one of only three amateurs at the site. It was early May and never got above 52 degrees Fahrenheit that day...very cold for serious golf. I was cold and nervous and could not get the ball airborne on the range. I was duck-hooking terribly and uncontrollably. I was going to walk to my car. I did not have it figured out even as I stepped onto the tee. We started on the tenth hole, which had out of bounds down the left side, very close to the fairway. The two pros I was playing with bombed it. I put my tee in the ground and was actually still thinking of picking it up and walking to my car.

Instead I thought, "Who hits a cut? Who hits a cut? Trevino hits a cut. Aim Left, Swing Right, Walk Straight." So I pointed myself out of bounds left, looped it up as I turned down hard into my right leg and swung way out to the right. I hit a playable bunt straight down the middle about 230 yards and, in the process; felt the extreme torquing sensation of what I call "The Move" for the first time. I also felt the eversion move in my right foot as it came away from the ground the way I had witnessed years before watching Rick Stallings hit shots barefoot. I was about 50 yards short of my playing partners, but I was in play and I got some confidence. They were hitting 9-irons in and nearly crapped their pants when I hit the flagstick with my 5-iron second and stuck it 12 feet from the pin.

I shot a 74 I believe, and finished in a tie for 3rd. I missed advancing by a single shot. Only six golfers broke 80 that day, but all that mattered was that I had found and felt "The Move." I learned later that by introducing a limitation into the backswing you could actually trip the transition, drastically reducing the need to time a notoriously devilish part of the swing.

One week later I was low qualifier for the 1996 Ontario Amateur for our section at Port Colborne G&CC.

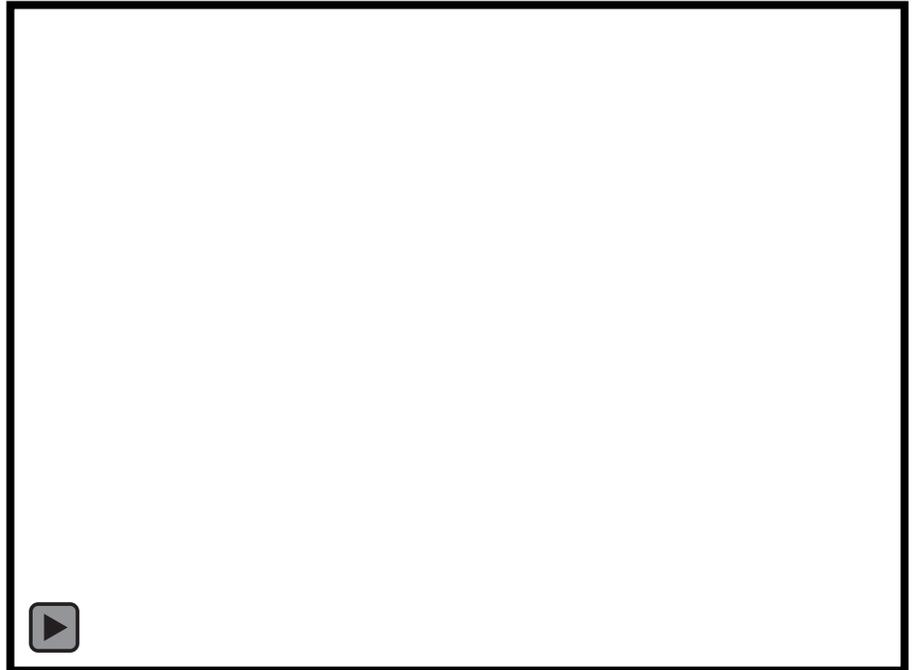


Some 12 years later, I drew a picture of what I felt in my right foot through the ball, and posted it on Golfwrx.com. It is the maintenance of this feeling in the right (rear) foot that causes the right hip to move correctly during the downswing, and the heel to move target ward, as the pressure leaves the foot as you move through the ball.

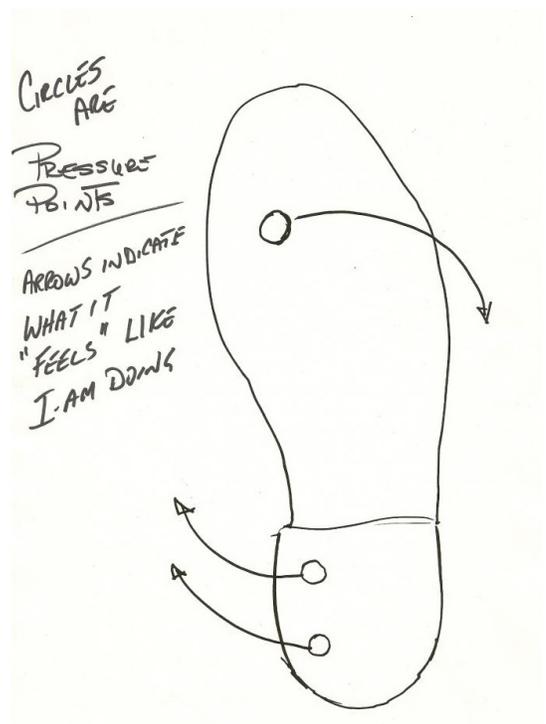
Monroe Country Club



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That picture is still the best illustration of how my right foot feels on the backswing right through transition.



Here are some more pictures showing my footwork through the swing:



REPEATING "THE MOVE"

THE PRE-TORQUE

"I learned to put this torquing feeling into the right foot and build it into my address during practice sessions."

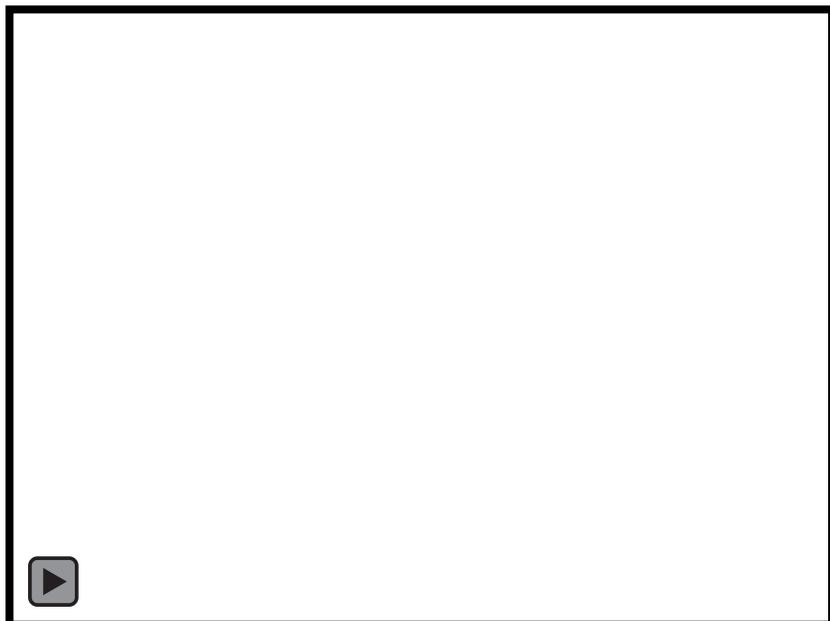
So now I had felt the correct action of the right leg and I had felt the power build right through transition. The key was to maintain that clockwise pressure as I moved left. It caused the lower body to move more like Ben Hogan's did and it caused great pressure to wind into the right leg. Essentially, by turning and building pressure into the inside of the foot with a focus on the ball of the foot I was able to execute a target ward move with the lower body without losing the pressure and tension that I had built up on the backswing. I learned to put this torquing feeling into the right foot and build it into my address during practice sessions. Soon a properly executed pivot was driving my action over and over again. The Pre-torque had me feeling for the first time the pressure that great ball strikers build into the right side on the backswing. Most do it naturally as part of a finely managed backswing.

To get the basics of The Move, I still believe that the original "The Move" YouTube video gets the job done best. Here it is. If you can get this down, then you can begin to move in a manner in which the totality of Ben Hogan's words and actions will make total sense and the mechanics of the Hogan Secret are within your reach.

The Move



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LANDING LEFT

"These motions cannot and should not necessarily all be viewed in the negative because, properly coordinated, this type of action can yield exceptional power and accuracy."

As I have mentioned a number of times, golf is a two sided game. The left side and the right side both have a role to play. In the simplest sense we can imagine the roles of the two sides as a matter of balance, of yin and yang so to speak. The downswing emanates from the right and its pressures are felt most profoundly in the ball of the right foot, but the left side also pulls and it is the left side that catches us and contains our target ward motion through the ball. The pressure exits the right side through the ball of the right foot and you should feel pressure here long into the downswing, but it is the left side that must remain ready and in position to receive throughout the entire swing motion.

In the impact zone, I used to imagine that I was actually transmitting force from one ball to another. That is from the ball of the right foot up through the body, shoulders, arms, hands and club head into the golf ball itself. A strange image you might think, but a powerful one for my own purposes. Because the longer and more powerfully I pressured the ball of the right foot on the downswing, the further the golf ball tended to go and the more in synch my motion was at the bottom. In addition, the club head stayed square to my target as I swung and pushed it through. What I was feeling was indicative of the strength and speed of the rotational forces I was conjuring up with the body in general. As I like to say, "It can't help but help".

There is a notion that the downswing must start with a rather significant lateral move, or "bump" of the hips to the left, but this is only so in certain circumstances and for certain types of swings. As a simple rule, the higher the hands rise above the shoulder plane on the backswing, the more dramatic the early lateral move and accompanying weight transfer to the left will have to be to drop the hands into position on the downswing. This is basically the great Harvey Penick's "magic move", and it is of course a wonderful



one for those golfers who swing the arms upward into a position from which they must find a way to get the right elbow to migrate down and return to the side. The beauty of Mr. Penick's move is that the hands also simultaneously drop into proper position to enter the hitting area.

In general, the arms rise above the shoulder plane in three distinct ways – 1. When the mass is carried on the outside of the right foot on the backswing as the left arm disconnects from the body; 2. when the golfer swings too deeply on the backswing; 3. when the golfer simply makes a deliberate effort to reach for the sky on the backswing. In other words, if the general trend of the backswing is not down or “into”, then the arms will tend to lift along with everything else. These motions cannot and should not necessarily all be viewed in the negative because, properly coordinated, this type of action can yield exceptional power and accuracy. The governing issue, however, is the execution and management of Mr. Penick's magic move. In other words there is a compensatory action required. With Ben Hogan, Moe Norman, Peter Thomson, Harry Vardon and many others, however, this magic move was either entirely unnecessary or a muted version of what would suffice within the framework of their golf swing. These are the swings that I want to focus on because it is the elimination of unnecessary moves that in my opinion leads to the most efficient swings. In these swings the objective of the hips movement in transition is not to drop the hands, but simply to shift out of one's own way. A big early target ward weight transfer is not necessary if the primary objective is simply to get out of one's own way to permit free passage for the actions of the hands, arms and torso..

The question to ask now is what happens if we move the hands and arms straight into the hitting position on the backswing rather than raising them up to the sky.

Percy Boomer, legendary instructor and author of “On Learning Golf” recommended that on the backswing the left arm should feel as if it is being held down or, at a minimum, resisting the tendency to rise on the backswing. “Down” seems to be the operative word in most of what I am trying to relay to people about hitting golf balls as well. If the hands remain relatively low or in line on the backswing relative to the line of the shoulders then a dramatic move left to drop the hands is unnecessary. The hands are already where they need to be. So what do we do from the low hand position? We do exactly what Ben Hogan told us to do in Five Lessons. We turn the hips back towards the target.

If the right leg is pressured properly and the mass is contained on the inside of the foot this move will almost invariably have started itself as we complete the backswing. This is what I have described on the web and in this book as “The Move”. It is basically



a back shifting pivot. The higher the hands raise above the shoulder plane on the backswing the more lateral movement and mass transfer must accompany the move. Ideally, you just keep the ball of the right foot pressurized and move the navel target ward and on a natural arc to the left.

The body in this motion acts like a bow being stretched. This simple action makes extra room for hands and arms to do their business from the inside and gets the downswing off to a running start. It's like anything else. You have to know what you're trying to do.

Now, on the backswing if you move to the outside of the right leg (you will feel this as weight migrating to the outside of the right foot) the hands and arms in general will also tend to lift and so a compensating move will be necessary. Luckily for many golfers the lateral move back to the left will almost invariably happen anyway because it is one of the body's natural responses to a compromise in balance.

Sam Snead used his famous squat move to get everything into position. This bit of timed genius is what kept him on the right side so late in the downswing and retained the ability to push target ward late in the downswing in spite of a backswing that, in terms of efficiency, was probably a little longer than was likely to be needed.

The first part of the swing is essentially a winding up in the opposite direction of the intended strike. The entire point of the backswing is simply to reliably move you from a static address position into a position to deliver the club head with speed and force squarely to and through the back of the golf ball.

he backswing. By this I mean that although there is a positive benefit to giving the club head some early speed and inertia to react to during the backswing, the goal of the backswing is in reality not speed at all. Rather it is largely and, unfortunately in some respects, simply a positional affair. As many of you are already aware, I am not big on emphasizing positions and so herein lay a positional problem to be solved. We solve it with reaction, natural extension and, in a nutshell, a swing. This is where I see a benefit to developing a trigger. A trigger is a move that says "Go!" and more importantly a move that puts motion in the club head that you can feel and react to.

In short, the heavy end has to get moving or it cannot pull, and it is the pull of the swinging mass of the club head that you want to be aware of and react to throughout the swing. I myself make a lateral move left and pull the club with the extended right arm to get a little speed that I can feel into the club head. You will have to experiment to find the best way to get that club head moving. You just want to make sure that you are not levering or hinging it up. There is no width and also no feel in that sort of takeaway.



On the backswing, angles are created. In transition these angles deepen. The business of the downswing in a way is to get rid of those angles in the hitting area and “through the ball”. We are generally maintaining our incline to the ball, but the hips, legs, arms and the balance of the mass that remains on the right through transition must shift and extend “through the ball”. This is the release. In the release the golfer feels a shift and extension.

The movement of the body is what pulls the mass from the ball of the right foot. It feels like the pull of the left knee is tugging the weight away from the ball of the right foot through the impact zone. The weight is not actively thrust off of the right foot. The right leg is simply maintaining the live tension and torque that was built into it on the backswing.

The feeling of pressure and mass simply leaves and the feeling is more that the pressure is simply pulling away from the ball of the right foot as the downswing progresses and the mass of the hands and arms pass the right foot into the area of impact.

In Ben Hogan’s Five Lessons, Mr. Hogan said that it was the body that moved the feet. LET THE BODY MOVE THE FEET. This is the feeling you experience as the hands pass the trail foot. It is precisely this loss of leverage that causes the club head to really start to catch up with the rest of the action. As you swing you will feel the rotational shear forces in the right foot dissipate as you move with everything that you have at your disposal “through the ball”.

Ernest Jones, and I have mentioned this earlier, said that the club head cannot be moved faster than it can be swung and this is for all intents true. Smooth acceleration, whether from a hitter’s perspective or from a pure swinger’s perspective is the goal. The swing requires speed at the bottom and “through the ball”. In fact all of your efforts on the downswing should be directed “through the ball”. Not AT, but THROUGH!! The downswing is a motion executed in balance “through the ball” and directed into the golf course. On your way into the golf course the left leg catches you. You land left.

In the ideal, the shaft would be powered squarely and pressured with accelerating leverage from at least hip high to hip high on the downswing. You feel this pressure in the hands, but it derives from the entire chain of action (legs, hips, trunk, shoulders and arms working against the ground through the feet). It is the constant forward thrust against the shaft that we want to feel. This thrust is powered by the turn/rotation of the body in conjunction with the natural thrust and extension of the arms and hands. The club head rotates to turn “square to the arc” as it enters the hitting area. This is attended to early by the simultaneous extension of the right arm and the bowing of the



left wrist, which occurs almost on its own at the end of the “free ride”. These actions are simultaneous and supportive of one another and are a product in many respects of a properly formed grip. (Again, refer to 5 Lessons on this point where you will find the finest articulation of the grip that I have ever seen.) Simply put, extending the right arm will effectively turn and bow the left wrist and similarly, turning and bowing the left wrist will lead to the extension of the right arm. These actions occur in tandem. As you practice you will benefit greatly by developing an awareness of the feel, weight and position of the toe of the club head as you swing. To develop awareness and feel for where the toe is throughout the swing, and in particular through the hitting area, is to know and feel what square to the arc is.

In the hitting area the club head should be freewheeling. Trying to do anything other than drive it on the arc it is travelling on is a waste of time. If you have attended to your alignment with reasonable care and moved through the backswing and transition segments of the swing then you should find yourself in position to simply drive through the ball with all that you have at your command. Trying to steer, redirect or otherwise manage what is happening in the hitting area likewise is effort ill-directed. At this stage there is nothing left to do except swing through the ball with conviction. That is the best that you can do and it is what you must do.

Here we come to the topic of this chapter and that is how one arrives into and upon the left side. Through the impact area, much depends on what we have set up for ourselves at address. Earlier, I pointed out that the rear foot (the right foot for a right handed golfer) is set square so that it could act as a governor on the backswing and prevent a turn of the hips that was deeper than advisable. This square position also leads to the tension necessary to automate the feel and function of the transition move back to the target.

The left leg, however, is set with the foot flared targetward at address to encourage exactly the opposite. On the downswing the first order of business is to get out of your own way. This means that the center of the body (the Navel) must move targetward and the hips must turn to make room for the upper body to carry out its business. For this reason the left foot should be flared towards the target. The degree of flare will have some dependence upon your personal level of flexibility. Ideally, the forward swing should have you finish with the hips opened to some point left of the target. Settling into a relaxed, balanced position at the finish finds your hips returning slightly, fairly much fronting the target directly. What is basically happening is that in the follow through of the swing, the hips overshoot and then settle back to the target.

If the left foot is not flared sufficiently the body will land on the left leg like hitting



a brick wall. This stalling of hips and the chasing mass will send the club head reeling past the hands as the turn abruptly halts. This is a flip release and unfortunately is fairly common.

This release can be very powerful if timed correctly, but the timing of this is very, very tricky business to say the least. Hitting into or more precisely against the front leg in this manner is basically the domain of the lucky and the brave. In any case it is not the path to consistent ball striking. This is why it is far more advisable to turn into a left leg that is set up to catch and contain you rather than stop you. The preferred action will stop you, but with a controlled deceleration that occurs after the ball has long been set on its way.

When moving into the left leg there are a number of ways that the leg can react to the pressure that it is confronted with. There are basically two things that the leg should do.

The first, beginning with the conventional address position described above, is to simply bow and flex targetward. This is the move that Moe Norman used through the ball. Byron Nelson's lead leg moved similarly. In this release, the hands turn over, but very late and long after impact. If the knee is flexing targetward as the golfer moves through the hitting area, the club head tends to release up and then turns over and to the left on the shoulder plane. Basically the golfer continues squarely downward through the ball.

The second way is to adjust your address position by further flaring the forward foot towards the target and resist, clockwise, with the left foot as it confronts the mass heading its way. This leads to an accelerated turn of the left hip, driving it further out of the way and straightening the left leg. This also results in a turning of the club head more inward and to the left immediately after impact.

Depending on the grip you have formed, the blade will either remain square (toe up at hip high on the follow through) or it will turn over, but this action occurs also long after the ball has left.

This sequence of movement into the left leg, which I call RESIST, RISE, RELEASE and ROLL, is referred to in this sequence in the video on the second part of "The Move".



"The Move" Part 2



**WATCH
NOW**



In essence, as the lead leg straightens the whole works shoots through the impact zone. The momentum of this sends your weight to the outside of the left foot on the finish. This is fundamentally how Ben Hogan, Lee Trevino and Sam Snead finished their swings and visually is the classic erect finish to a golf swing; tall and on the extended lead leg. It is inertia combined with controlled resistance in the lead leg that takes the golfer to the classic finish.

There are other finishes, but the two that I have described in my experience both yield solid results and most importantly obviate the stall and flip action that invariably plagues the average golfer. There is a perception among golfers that the arms cross over one another the way, for instance, someone might try to uppercut a slo-pitch ball. In golf this is the last thing you want to try to do. In golf the blade is squared early by the arm/hand action I have described and then driven through the ball squarely by the turn and thrust of the body. The job of the hands and arms is to aid in the acceleration that is set in motion by the pivot, turn and thrust of the center of the body and to simply drive squarely through the ball and into the golf course. Most importantly the hands and arms do not steer.

Keep in mind always that conviction rarely hits a ball out of bounds. Indecision, timidity, deceleration and steering are the usual suspects. If you are going to make a mistake at least do yourself the favor of doing it boldly!! Chances are that with that attitude the mistakes will be far fewer.





Henry Cotton

*Finished in the top ten
17 times at the British
Open and won it 3 times.
Prolific practiser and writer.
Introduced concepts of
strength training to golf and
helped give stature to the
professional golfer in Europe.
Member of The World Golf
Hall of Fame*

FINAL THOUGHTS

VISUALIZATION AND FINAL THOUGHTS

"When we imagine the desired result and work it back to the corresponding finishing position we are using visualization."

There is a story about Ben Hogan at The Masters one year standing very long over what looked like a fairly simple putt. I don't even recall whether the putt was made or not (it probably was) but when he got off of the golf course he was asked why he had stood so long over that little putt. He replied "I couldn't see it going in." That is visualization.

You know, a lot of people seem to think that visualization has to be a sort of mystical thing. It can be, but all it needs to be is just a rehearsal that takes place in the mind. To one degree or another everyone does it. I think that the ideal would be to always experience the shot and least twice. Once in the mind and then once in real time as it actually happens.

So all we are talking about is just a mental rehearsal of what is going to happen next. It can be very simple. Very simple, but you must have a back catalogue of shots to recall and that is why practice and how we practice is so important. We visualize best based on a reference that we can recall and the mind accepts as true. I don't know a lot about how the brain works, but my own experience tells me that the brain seems to be best at handling things that it has handled previously. For this reason I think that it is important to participate deeply in your own practice sessions. Take your shots into yourself. Enjoy and savour the feeling of a well-struck shot. Watch it fly and pay attention to how it drifts through the air and how the wind plays with it and how it falls and what it does when it lands. When you hit a good one don't just rake another ball over to give it another go. Pay attention to what you just did. Pay attention to every shot in its totality because you will want to hit it again some day and the more completely you experienced it in the past the more likely it will be that you will be able to pull it out of the archives and dial it up again. Reconcile your finishing position with the shot that just happened. Experience your shots completely.

George Knudson believed that in golf you really only have to connect a balanced starting position to a balanced finishing position to assure the desired result. He also advocated that the golfer evaluate his finishing position and reconcile it with the ball flight as an exercise. These things equipped him to take what he was doing on the range out onto the golf course. When we imagine the desired result and work it back to the corresponding finishing position we are using visualization.

I don't like to describe things in terms of angles or measurements, but rather in terms of feels because recreating the feel that creates the angle or a particular orientation of one thing to another is what is repeatable. I can align myself better with the hole in the sky that I want the ball to go through than a line on the ground because I am tuning into the event that I am about to create. I can only really do that with confidence if that shot has been experienced previously. That is the unheralded value of our practice and of repetition. It gives us the necessary power to re-create.

My final thoughts now are of the experience of hitting a golf ball
and hitting it flush.

The strike radiating through me, reinforced by me.

The look of a launched sphere hurtling through space.

The sound of it.

The feel of it.

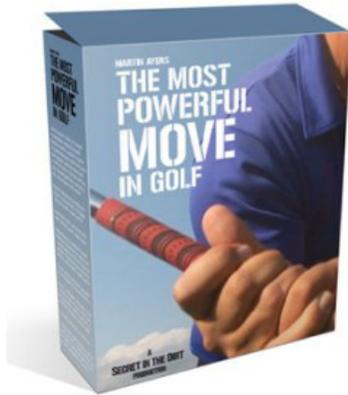
And the great feeling of knowing that I have sent it there.

My wish is that this book will help other golfers enjoy that same experience. I hope that it has.

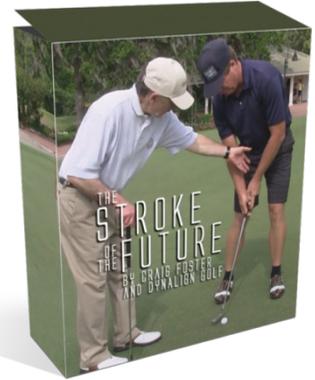
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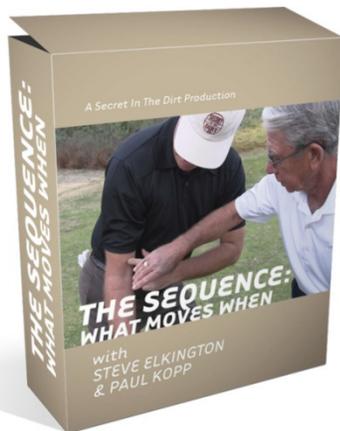
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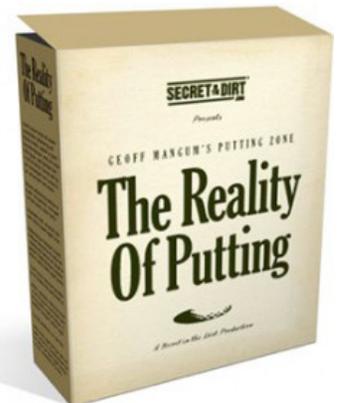
The Most
Powerful
Move in Golf



The Stroke of
the Future



The Sequence:
What Moves
When



The Reality
of Putting

